ORDER NO. ACED9911209

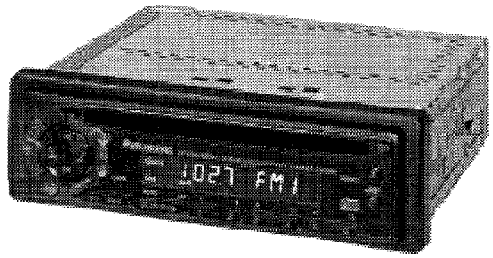
Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

COMPACT disc DIGITAL AUDIO

CQ-DP303W

Removable Face High-Power CD Player / Receiver



Please file and use this manual together with the service manual for model CQ-DP33EW order No. ACED99202189.

NOTE : Mentioned in this service manual are the differences from model No. CQ-DP33EW for the parts changes.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 REPLACEMENT PARTS LIST

Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

1.1. Accessories

PRINTING

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	CQ-DP33EW	CQ-DP303W		
	YGFM282970	YEFM283509	Operating Instructions	

1.2. Mechanical Parts

MISCELLANEOUS

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	CQ-DP33EW	CQ-DP303W		
1	YEFA031359D	YEFA031359E	Upper Cover	
7	YEFC026175	YEFC026693	Escutcheon Ass'y, Detachable	
10	YEFE135572	YEFE135571	Button, Preset	

E-846
Printed in Japan (S)
1999.11
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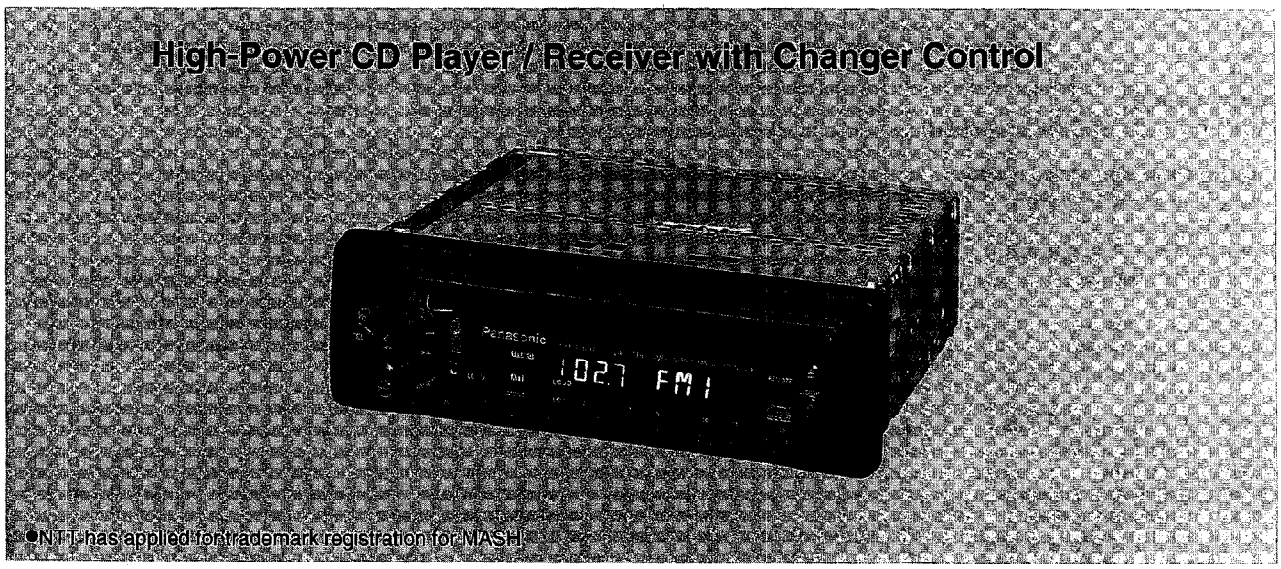
Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

COMPACT disc DIGITAL AUDIO

CQ-DP33EW


High-Power CD Player / Receiver with Changer Control
Panasonic
1027 FM1
●NTT has applied for trademark registration for MASH.

Specifications*

General

Power Supply	: DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Maximum Power Output	: 40W × 4ch, at 400Hz, Vol. MAX
Power Output	: 14W × 4ch (DIN45 324, at 4Ω)
Tone Action	: Bass ; ±12dB at 100Hz Treble ; ±12dB at 10kHz
Per-AMP Output Voltage	: 2.0V (CD Play Mode ; 1 kHz 0dB)
Output impedance	: 600Ω

AM Radio

Frequency Range	: 531 - 1,602kHz
Usable Sensitivity	: 28dB/μV (25μV,S/N 20dB)

FM Stereo Radio

Frequency Range	: 87.5 - 108MHz
Usable Sensitivity	: 6dB/μV (S/N 30dB)
Stereo Separation	: 42dB at 1,000Hz

CD Player

Sampling Frequency	: 32 times oversampling
DA Converter	: MASH·1bit/4 DAC System
Error Correction System	: Panasonic Super Decoding Algorithm
Pick-Up Type	: Astigma 3-beam
Light Source	: Semiconductor laser
Wavelength	: 780 nm
Frequency Response	: 20 Hz - 20,000Hz, ±1dB
Signal/Noise Ratio	: 96 dB
Total Harmonic Distrortion	: 0.01% (1,000Hz)
Wow and Flutter	: Below measurable limits
Channel Separation	: 75 dB

Dimensions(W×H×D)**	: 7"×1-15/16"×5-7/8" (178×50×150mm)
Weight**	: 3lbs 1oz (1.4kg)

* Specifications and the design are subject to possible modification without notice due to improvements

** Dimensions and Weight showm are approximate.

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⚠WARNING

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FEATURES

- 32bit-times oversampling MASH 1bit 4-DAC system.
- Digital servo for rellable playback.
- PLL (Phase Locked Loop) synthesized tuning.
- 18-FM, 6-AM presets with preset scan.
- Intelligent volume control.
- Removable face plate.
- CD changer control.

FUSE

Be sure to use a fuse of the specified rating (15A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

MAINTENANCE

To clean the exterior of this unit, use a soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvents.

RADIO AND CD DECK ALIGNMENT

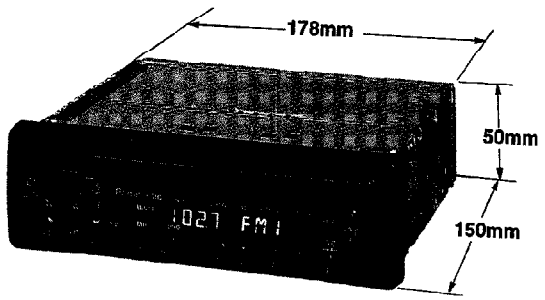
■ RADIO BLOCK

Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

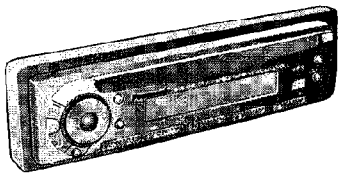
■ CD DECK BLOCK

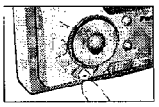
This model has no servo alignment points because microcomputer controls the servo circuit.

DIMENSIONS



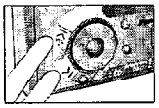
Power and Sound Controls





Power

If the car is not already running, turn the key in the ignition until the accessory indicator lights.
Press **[PWR]** to switch on the power.
Press **[PWR]** again to switch off the power.
Note: When a CD is inserted with all power connected, the unit power will automatically turn on and CD loading begins and plays.

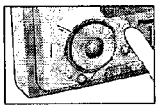


Volume

- Press **[∧ VOL]** or **[∨ VOL]** to increase or decrease volume.

Volume Level (0 to 40)

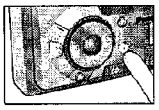
- Press **[∧ VOL]** or **[∨ VOL]** for more than 0.5 second to change numeric levels on the display rapidly.



Attenuator

- Press **[ATT]**. Volume will decrease to about ⅛ of its previous level.

- Press **[ATT]** again to deactivate when listening at normal volume.



Tone Enhancement

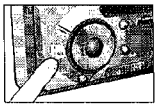
- Press **LOUD [L]** to enhance bass and treble tones when listening at low or medium volume.

- Press **LOUD [L]** again to deactivate.

Note: This unit is equipped with an anti-volume-blast circuit which serves as an automatic volume level adjuster so that you will not be deafened sudden loud volume.
This system operates as follows. When **[PWR]** is switched on, the volume level is low. After that, the volume level gradually returns to its previous level prior to switching off the unit.

Power and Sound Controls

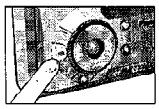
(continued)



Changing Audio Modes

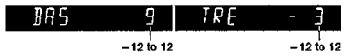
Press **[SEL]** to switch the audio mode in the following order.

VOLUME→BASS→TREBLE→BALANCE→FADER



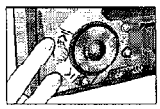
Bass and Treble

- Press **[SEL]** to select the BASS (TREBLE) mode. Press **[∧ VOL]** or **[∨ VOL]** to increase or decrease the bass/treble response.



−12 to 12 −12 to 12

- Press **[∧ VOL]** or **[∨ VOL]** for more than 0.5 second to change numeric levels on the display rapidly.



Balance

- Press **[SEL]** to select the BALANCE mode. Press **[∧ VOL]** or **[∨ VOL]** to shift the sound volume to right or left speakers.

or L 1 to 15 Balance Center

- Press **[∧ VOL]** or **[∨ VOL]** for more than 0.5 second to change numeric levels on the display rapidly.

Fader

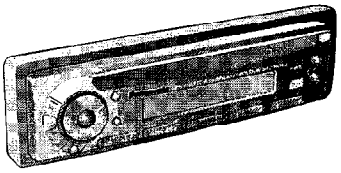
- Press **[SEL]** to select the FADER mode. Press **[∧ VOL]** or **[∨ VOL]** to shift the sound volume to the front or rear speakers.

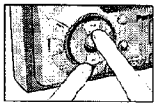
or R 1 to 15 Balance Center

- Press **[∧ VOL]** or **[∨ VOL]** for more than 0.5 second to change numeric levels on the display rapidly.

Note: When a control mode (BAS/TRE/BAL/FAD) is selected but no operation is made within 5 seconds (2 seconds at volume mode), the display will return to the normal operation (Radio, CD, etc) mode. In such a case, press **[SEL]** again to select the control mode.

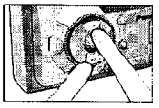
Radio Basics





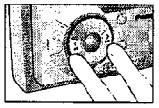
To change Tuner Mode

You can select "FM" or "AM" directly.



Selecting a Band

- Press **[FM]** to select the bands in the following order.
  FM1→FM2→FM3
  "STEREO" indicator lights if the station is broadcasting in stereo.
- Press **[AM]** to select the bands.

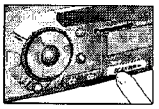


Manual Tuning

Press **[> TUNE]** or **[< TUNE]** to move to a higher or lower frequency.

Seek Tuning

Press and hold **[> TUNE]** or **[< TUNE]** for more than 0.5 second, then release. The radio automatically steps on the next station.

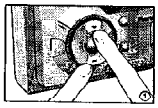


MONO/LOCAL Selection

- Much interference is reduced during a weak FM stereo broadcasts when MONO is ON. (Only for FM mode)
- Searching stops automatically at a strong wave station only when LOCAL is ON.

Press **[MONO]** to switch on or off the MONO mode as follows.
MONO OFF⟷MONO ON
Press **[LOC]** to switch on or off the LOCAL mode as follows.
LOCAL OFF⟷LOCAL ON

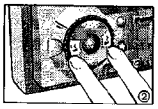
Radio Basics (continued)



Preset Station Setting

Up to 24 stations can be preset in the station memory as follows:

FM1	FM2	FM3	AM
6 stations	6 stations	6 stations	6 stations



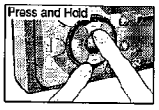
Manual Station Preset

①Press **[FM]** or **[AM]** to select a desired band.
②Use manual or seek tuning to find a station that you want to program into memory.
③Press and hold one of the station selector buttons **[1]** through **[6]** until the display blinks.
Repeat the process to set other stations for the FM1–3 and AM bands.

Note: You can change the memory setting by repeating the above procedure.

Tuning in a Preset Station

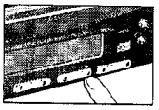
Press any of the buttons **[1]** through **[6]** to tune in the station preset by the above steps ① to ③.



Auto Station Preset

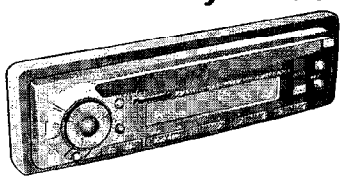
Press and hold **[FM APM]** or **[AM APM]** for more than 2 seconds.

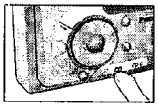
- The 6 strongest available stations will be automatically set in memory preset buttons **[1]** through **[6]**.
- Once set, the preset stations are sequentially scanned for 5 seconds.
- Press the appropriate preset button for the station you want to hear.



Caution: For safety reasons, do not attempt to program while driving.

Compact Disc Player Basics





Mode Selection

While the disc is inserted, press [CD] to select CD mode.

To start the CD Player

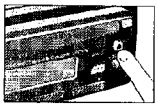
Insert the disc (label side up) and playback starts automatically.

"LOAd" will be displayed until the disc is loaded. Play starts from first track.

Track number

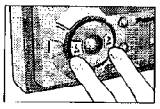
Play time

Note: While the disc is inserted, "DISC" indicator will light. If you press [CD] after the disc is ejected, the disc will be re-inserted.



Stopping and Ejecting a Disc

Press [⏏] to stop CD play, and the disc will quietly eject from the CD slot. (During disc ejection, "EJ" (EJECT) will be displayed.)

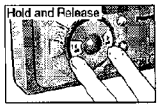


Selecting a Track

Press [▶▶ TRACK] once to go to the next track. Press repeatedly to step forward through all the tracks.
Press [◀◀ TRACK] once to play from the beginning of the track you are listening to. Press twice to play the previous track. Press repeatedly to step backward through all the tracks.

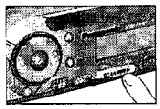
Compact Disc Player Basics

(continued)



Searching a Track

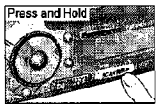
Press and hold [▶▶ TRACK] or [◀◀ TRACK] for more than 0.5 second to activate fast forward or reverse through a track.
Release [▶▶ TRACK] or [◀◀ TRACK] to resume the normal CD play from that position.



Repeating a Track

Press [R/R ▶] to repeat the current selection. "REP" indicator will light.

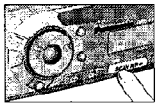
The current selection will continue to repeat until you press [R/R ▶] again.



Random Selection

Press and hold [R/R ▶] for more than 2 seconds. "R ▶" indicator will light. A random selection of music is played from all available tracks.

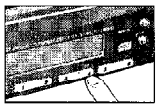
To turn off the random play feature, press and hold [R/R ▶] again for more than 2 seconds.



Scanning Tracks

Press [SCAN]. The display will blink and the first 10 seconds of each track on the disc play in order.

To stop scanning and continue with the current track, press [SCAN] again.

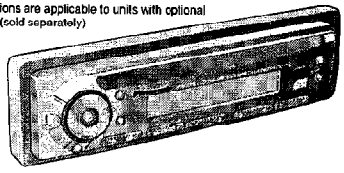


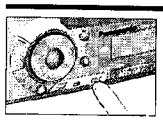
Selecting by Track Number (Direct access)

- Press a number from [1] to [6] then the corresponding track will start.
- Press and hold a number from [7] to [12] ([1] to [6]) for more than 1 second and the corresponding track will start.

CD Changer Basics

Note:
CD changer functions are applicable to units with optional CD changer unit. (sold separately)



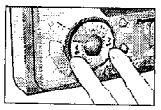


To start the CD Changer

While a disc magazine inserted in the CD Changer, press [CD-C] to play starts from first track.

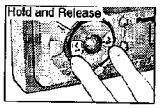
Selecting a Disc (Direct Disc Access)

- Press a number from [1] to [6] then the corresponding disc will start.
- Press and hold a number from [7] to [12] ([1] to [6]) for more than 1 second and the corresponding disc will start.



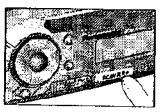
Selecting a Track

- Press [▶▶ TRACK] once to go to the next track. Press repeatedly to step forward through all the tracks.
- Press [◀◀ TRACK] once to play from the beginning of the current track. Press twice to play the previous track. Press repeatedly to step backward through all the tracks.



Searching a Track

- Press and hold [▶▶ TRACK] or [◀◀ TRACK] for more than 0.5 second to activate fast forward or reverse through a track.
- Release [▶▶ TRACK] or [◀◀ TRACK] to resume the normal CD changer play from that position.

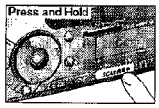


Repeating a Track

Press [R/R▶] to repeat the current selection. "REP" indicator will light.

The current selection will continue to repeat until you press [R/R▶] again.

CD Changer Basics (continued)

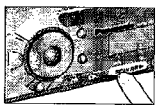


Random Selection

Press and hold [R/R▶] for more than 2 seconds. "R▶" indicator will light. A random selection of music is played from all available tracks.

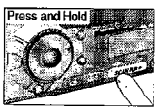
To turn it off, press and hold [R/R▶] for more than 2 seconds again.

Note:
- When [R/R▶] is pressed in the Random mode, the current track will continue to repeat until pressing [R/R▶] again.
- When [R/R▶] is pressed again, repeat play stops and returns to random play.
- Press and hold [R/R▶] for more than 2 seconds again, random play stops.



Scanning Tracks

Press [SCAN]. The display blinks and the first 10 seconds of each track on the discs play in order.
To stop scanning and continue with the current track, press [SCAN] again.



Scanning Discs

Press and hold [SCAN] for more than 2 seconds. The 1st track of all the discs in the magazine is played for 10 seconds each. Also, disc number is displayed at the same time.
To stop scanning and continue with the current track, press and hold [SCAN] for more than 2 seconds again.

Note: You cannot change the current display while Scan plays in CD or CD Changer.

Error Display Messages

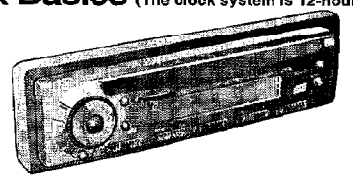
❒ CD

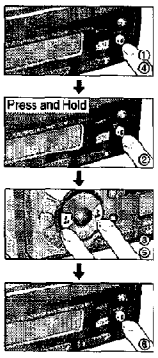
E1	Displays when the compact disc is dirty or upside down. The disc eject automatically.
E2	Displays when compact disc is scratched. The disc eject automatically.
E3	Displays when the compact disc stops operating for some reason. Please turn off the car engine (ACC off) and remove the fuse from yellow lead for 1 minute. Then reinstall the fuse.

❒ CD-Changer

E1	Displays when the compact disc is dirty or upside down. Selects the next available compact disc.
E2	Displays when compact disc is scratched. Selects next available compact disc.
E3	Displays when the unit stops operating for some reason. Press [RESET] on the CD Changer (optional).
0000	Displays when there is no disc in the magazine.

Clock Basics (The clock system is 12-hours.)





Initial Time Setting

① Press DISP [D]. "Adj" is displayed.

② Press and hold DISP [D] again for more than 2 seconds, "12" blinks indicating the time setting mode is activated.

③ To set hours, press [> TUNE] or [< TUNE].

④ Press DISP [D] again for minute setting.

⑤ To set minutes, press [> TUNE] or [< TUNE].
Hold [> TUNE] or [< TUNE] to change numbers rapidly.

⑥ When you have set the time, press DISP [D].

Resetting the Time

When you want to reset the time, press and hold DISP [D] for more than 2 seconds to activate the time setting mode. Then, repeat steps ③ to ⑥ above.

Selecting the Clock Display

Press DISP [D] for clock display.
Press DISP [D] once again, the current audio display mode resumes.

Note: Before you leave your car that has no ACC, be sure to switch power off.

Installation Guide

Preparation:
- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (−) battery terminal (see caution below).

Caution:
For installation to cars with trip or navigational computer, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery could not be disconnected. Therefore, extra care should be taken to prevent short circuitting.

In dash installation
Installation Opening
In-dash installation can be done if the car's dashboard has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of 4.5mm-6mm in order to make the installation of the unit.

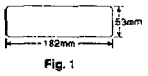


Fig. 1

Installation Precautions
This equipment, if possible, should be installed by a professional installer.
In case of difficulty, please consult your nearest authorized Panasonic Service Center.
1. This system is to be used only in a 12-volt, DC battery system (car) with negative ground.
2. Follow the electrical connection (➡ page 19) carefully. Failure to do so may result in damage to the unit.
3. Connect the power lead after other connections are made.
4. Be sure to connect the YELLOW lead to positive terminal (+) of the battery to fuse block (BAT) terminal.
5. Insulate all exposed wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

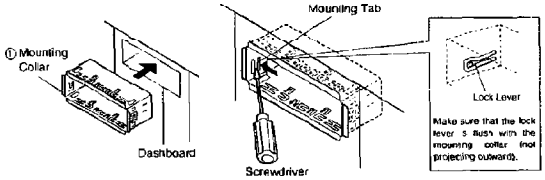
❒ Installation Hardware

①	Mounting Collar		1	⑤	Mounting Bolt (5 mmϕ)		1
②	Hex. Nut (5 mmϕ)		1	⑥	Power Connector		1
③	Rear Support Strap		1	⑦	Trim Plate		1
④	Tapping Screw		1				

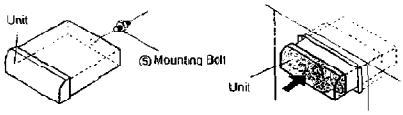
Installation Guide (continued)

❒ Installation Procedures

1. Secure the Mounting Collar ①.
Insert Mounting Collar ① into the car's dashboard, and bend mounting tabs out with a screwdriver.

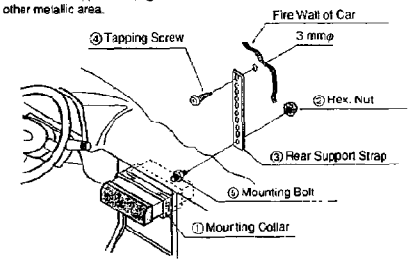

Mounting Tab
① Mounting Collar
Dashboard
Screwdriver
Lock Lever
Make sure that the lock lever is flush with the mounting collar (not projecting outward).

2. Secure the rear of the unit.
a) Check the electrical connection by referring to this operating instructions.
b) Connect the Mounting Bolt ⑤, using a suitable wrench.
c) Insert the unit into Mounting Collar ① and push it in until "click" is heard.

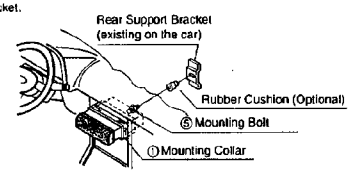


d) Secure the rear of the unit to the car by either of the two recommended methods.

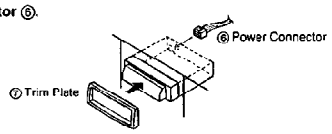
■ Using the Rear Support Strap ③
Affix one end of the Rear Support Strap ③ to the rear of the unit, and the other end to the Fire Wall of Car, or some other metallic area.



■ **Using the Rubber Cushion (Optional)**
(If there is an existing Rear Support Bracket on the Fire Wall of Car.)
Cover Mounting Bolt ⑤ on the rear of the unit with Rubber Cushion (Optional), and mount it into existing Rear Support Bracket.



3. a) Plug the Power Connector ⑥.
b) Install the Trim Plate ⑦.

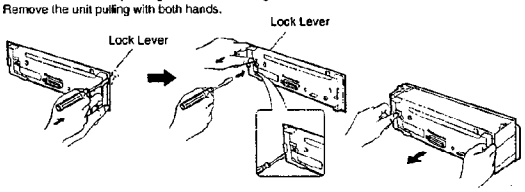


4. After installation reconnect the negative (—) battery terminal.

To Remove the Unit

a) Remove the removable face plate. (➡ Page 18.)
b) Remove the trim plate ⑦ with a screwdriver as shown in the figure.

c) Pull out the unit while pushing the lock lever using a screwdriver.
d) Remove the unit pulling with both hands.



Installation Guide (continued)

Anti-Theft System

This unit is equipped with a removable face plate. By removing this face plate, the radio becomes totally inoperable.

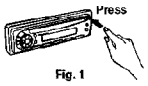


Fig. 1

To Remove the Removable Face Plate

①Switch off the power.
②Press the release button [⏏]. The removable face plate will be released. (➡ Fig. 1)
③Remove the removable face plate by pulling on the right side of the unit. (➡ Fig. 2)

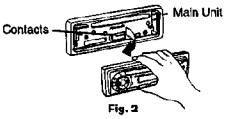


Fig. 2

To Install the Removable Face Plate

①Slide the left side of the removable face plate in place. (➡ Fig. 3)
②Press the right end of the removable face plate until "click" is heard. (➡ Fig. 4)

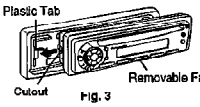


Fig. 3

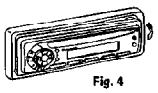


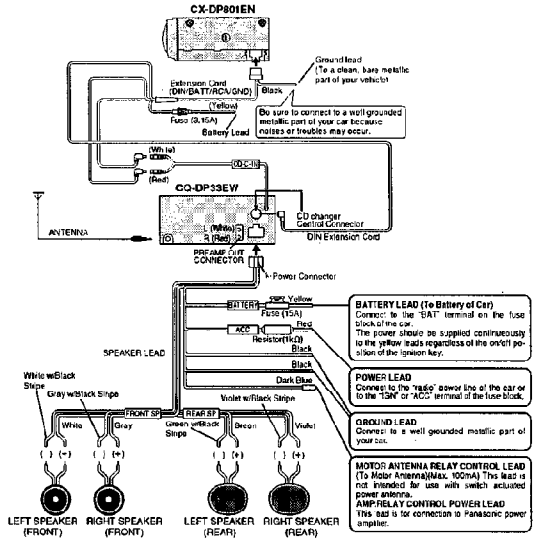
Fig. 4

Caution:
1. Before removing the removable face plate, make sure the power is off.
2. The removable face plate is not water-proof. Do not expose it to water or excessive moisture.
3. Before removing the removable face plate, be careful during your car.
4. Do not place the removable face plate where the dashboard or directly where the temperature is high or low.
5. Avoid exposing the contacts to the removable face plate or on the main unit, since this may be caused by vibration over long periods.
6. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.

Electrical Connection

Caution:
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Before the wiring of the leads, avoid connecting them and be sure to connect.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables, and keep cable terminals free from touching any metal parts.

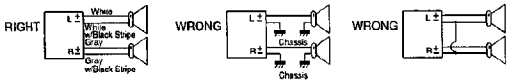
- This unit can be connected to an optional CD changer (CX-DP801EN). For details consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP801EN).


CX-DP801EN
Ground lead
(To a clean, bare metallic part of your vehicle)
Extension Cord (DIN/BATT/ACC/GND)
Black
(Yellow)
Be sure to connect to a well grounded metallic part of your car because noises or troubles may occur.
Fuse (3.15A)
Battery Lead
(White)
(Red)
CQ-DP33EW
ANTENNA
CD changer Control Connector
DIN Extension Cord
REAR AMP. OUT CONNECTOR
Power Connector
BATTERY
Yellow
Fuse (15A)
ACC
Red
Resistor(1kΩ)
Black
SPEAKER LEAD
Black
Dark Blue
White w/Black Stripe
Gray w/Black Stripe
Violet w/Black Stripe
FRONT SP
REAR SP
White
Gray
Green w/Black Stripe
Brown
Violet
BATTERY LEAD (To Battery of Car)
Connect to the "BAT" terminal on the fuse block of the car.
The power should be supplied continuously to the yellow leads regardless of the on/off position of the ignition key.
POWER LEAD
Connect to the "radio" power line of the car or to the "IGN" or "ACC" terminal of the fuse block.
GROUND LEAD
Connect to a well grounded metallic part of your car.
MOTOR ANTENNA RELAY CONTROL LEAD
(To Motor Antenna)(Max. 100mA) This lead is not intended for use with switch actuated power antenna.
AMP.RELAY CONTROL POWER LEAD
This lead is for connection to Panasonic power amplifier.
LEFT SPEAKER (FRONT)
RIGHT SPEAKER (FRONT)
LEFT SPEAKER (REAR)
RIGHT SPEAKER (REAR)

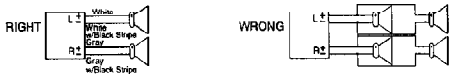
Speaker Connections

Caution:
1. Use the speakers with an impedance value of 4Ω to 8Ω.
2. The speakers to be used with this unit should be able to withstand more than 50W (5Ω) power. Also, the speakers should be capable of handling the necessary amplification of the system. Use of speakers with small power ratings will cause damage to the speakers.
3. The speaker leads should be cut to the proper length before connecting to the speakers. Do not cut excess leads to shorten their length.
4. Do not use speakers by connecting the negative terminal to the metal part of the car. Do not connect the speaker leads of the right and left speakers to each other (to earth, chassis).
5. Do not connect speaker leads of more than 5Ω impedance.
6. Do not connect the power amplifier unit (optional) in such a way that it receives power from the speaker lead or antenna lead.
7. Follow the connection diagram below carefully. Failure to do so may cause damage to both the unit and car.

- **Unit will be damaged if speakers (Front, Rear) are not connected properly.**



- **Do not connect more than one speaker to one set of speaker leads.**



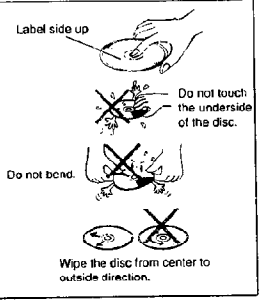
Special Notes

❒ Notes on Compact Discs

ONLY USE DISCS CARRYING LABEL SHOWN ON THE RIGHT COMPACT disc DIGITAL AUDIO

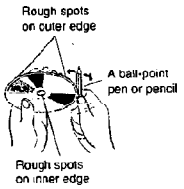
- Dirt, dust, scratches and bending of disc will cause misoperation.
- Do not place stickers or make scratches on discs.
- Do not bend discs.
- Disc should always be kept in the case when not in use to prevent from damaging.
- Do not place discs in the following places:
  1. Direct sunlight.
  2. Dirty, dusty and damp areas.
  3. Near car heaters.
  4. Seats or dashboard.

Disc Cleaning
Use a dry soft cloth to wipe the surface. If the disc is quite dirty, use a soft cloth slightly dampened in isopropyl (rubbing) alcohol. Never use solvents such as benzine, thinner, conventional record cleaner, or mopper as they may mar the surface of the disc.



❒ Caution for use of a New Discs

A new disc may have rough edges on its inner and outer perimeter. If a disc with rough edges is used, proper setting will not be possible and the CD player will not play the disc. Therefore, remove the rough edges in advance by using a ball-point pen or pencil as shown on right. To remove the rough edges, press the side of the pen or pencil against the inner and outer perimeter of the disc.



FUSE

Be sure to use a fuse of the specified rating (15A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit. If the replacement fuse fails, consult your nearest authorized Panasonic Service Center.

Maintenance

To clean the exterior of this unit, use a soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvents.

21

TERMINALS DESCRIPTION

< Main Block >

■ IC601 : YEAM17708563

Pin No.	Port	Description	I/O	Vol.(-V)
1	BATT	Battery detection	I	4.9
2	CD C2	Communication control	I	0
3	/CH STRB	CD changer strobe	I	0
4	—	(Connection to ground)	—	0
5	CD MUTE	CD mute	I	0
6	/TEL MUTE2	(Connection to ground)	—	0
7	/TEL MUTE	Telephone mute	O	4.9
8	—	(Connection to ground)	—	0
9	—	(Ground pull-down)	—	0
10	—	No connection	—	—
11	/CD ON	CD on/off control	O	0
12	/CD RESET	CD reset	O	4.9
13~15	—	No connection	—	—
16	HDB	Not used	—	—
17	MONO	Mono/ST selection	O	0
18	TUNER	Radio power control	O	0
19	SUB VOL	Not used	—	—
20	SSC	Serch stop clear	O	0
21	GND	Ground	—	0
22	LV R	Rch level detecion	I	0
23	LV L	Lch level detection	I	0
24	INIT B	Initial value B	I	4.9
25	INIT A	Initial value A	I	4.9
26	ACC SEN	ACC detection	I	4.0
27	SD	Field strength	I	0.6
28	AM IFC	(Connecting to ground)	—	0
29	FM IFC	FM IF input	I	0
30	VDD	+5V power supply	—	4.9
31	FM/AM OSC	FM/AM local oscillation	I	2.7
32	—	(Connecting to ground)	—	0
33	GND	Ground	—	0
34	EO1	PLL ogase-comp. error	O	1.5
35	EO2	Not used	—	—
36	NC	(Connecting to ground)	—	0
37	/ST	Stereo indicator	I	4.4
38	FM	FM/AM band selection	O	4.8

Pin No.	Port	Description	I/O	Vol.(-V)
39, 40	—	No connection	—	—
41	—	(Connecting to ground)	—	0
42	REM IN	Remocon data input	I	4.3
43, 44	—	No connection	—	—
45	/MS	(Connecting to ground)	—	0
46	BZ IN	Security SW input	I	4.6
47~50	—	No connection	—	—
51	—	No connection	—	—
52, 53	—	No connection	—	—
54	/P.LED	Power LED control	O	0
55	LCD DO	LCD driver data	—	5.1
56	PANEL	Panel detection	I	4.5
57	LCD DI	LCD driver data	O	0
58	LCD CLK	LCD driver clock	O	0
59	LCD CE	LCD driver CE	O	0.4
60	LED	Not used	—	—
61	—	No connection	—	—
62	RM DATA	Remocon data	O	4.8
63	I2C DATA	Electronic volume cont data	I/O	4.9
64	I2C CLK	Electronic volume cont clock	O	4.9
65	CH CLK	CD changer clock	I	0
66	NC	No connection	—	—
67	CH DATA	CD changer data	O	0
68	CD C1	Communication control	O	4.9
69	—	—	—	0
70	CD DATA	CD data	I/O	4.8
71	/MUTE	Mute output	O	4.8
72	PW CNT	System power control	O	4.7
73	—	No connection	—	—
74	VREG	Voltage regulator	O	3.5
75	GND	Ground	—	0
76	XOUT	Crystal oscillator	—	2.4
77	XIN	Crystal oscillator	—	1.3
78	CE	(Connecting to VDD)	—	4.9
79	VDD	+5V power supply	—	4.9
80	/RESET	(Connecting to VDD)	—	4.9

Note 1 : Voltage measurements are with respect to ground, with a voltmeter (Internal resistance : 10M ohms).

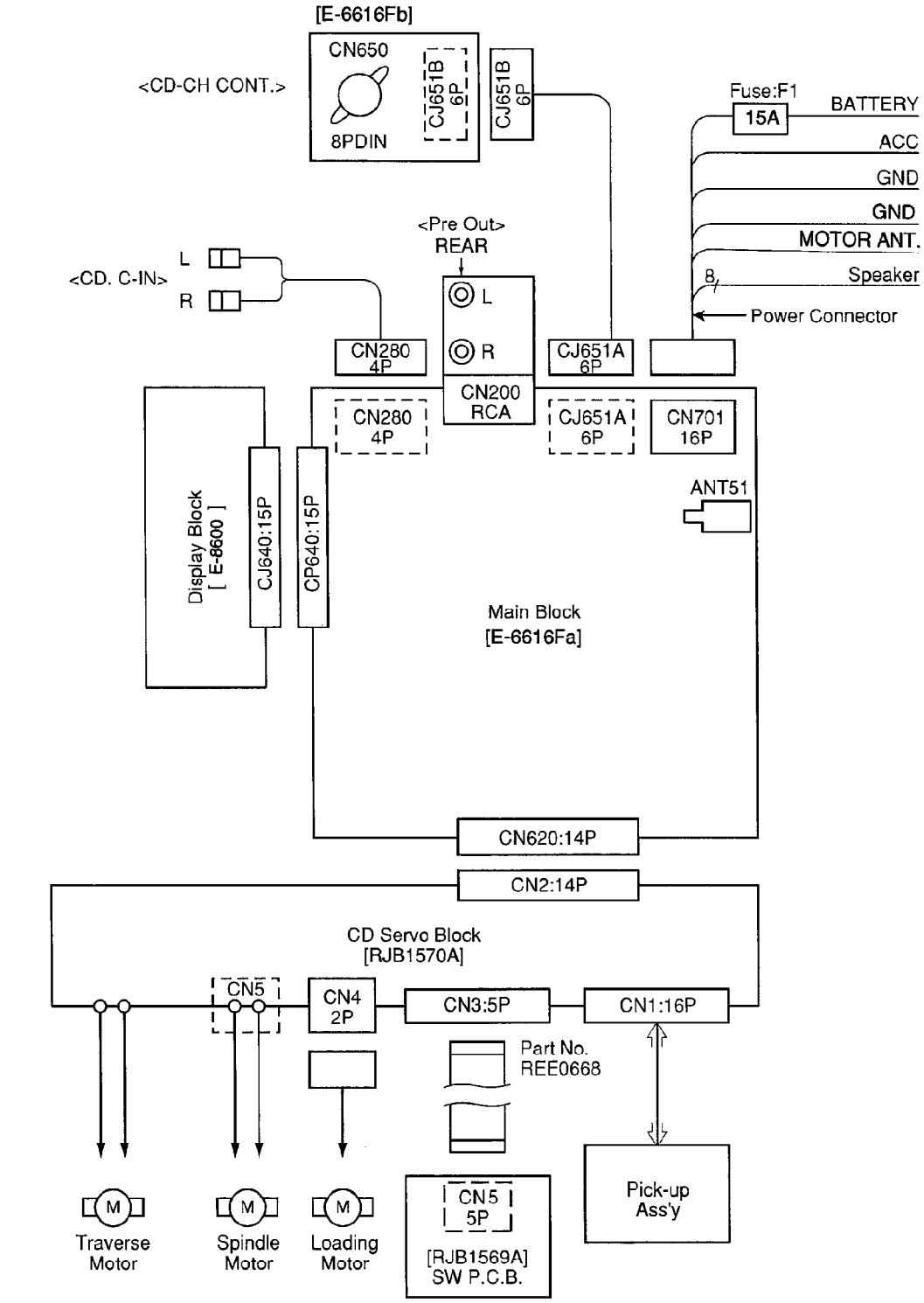
< Display Block >

■ IC901 : YEAMLC75853W

Pin No.	Port	Description	I/O	Vol.(V)
1	NC	No connection	—	—
2~28	SEG2~28	LCD segment	O	2.5
29~40	SEG29~40	Not used	—	—
40~43	COM1~4	LCD common	O	2.5
44~49	KS1~6	Key data output	O	0.9
50~54	KI1~5	Key data input	I	0
55	TEST	(Connecting to ground)	—	0
56	VDD	+5V power supply	—	5.1

Pin No.	Port	Description	I/O	Vol.(V)
57	VDD1	Ground through capacitor	—	3.3
58	VDD2	Ground through capacitor	—	1.7
59	Vss	Ground	—	0
60	OSC	CR oscillator	—	3.9
61	DO	Key data output	O	4.4
62	CE	Chip enable	I	0
63	CLK	LCD clock	I	0
64	DI	LCD data input	I	0

WIRING CONNECTION

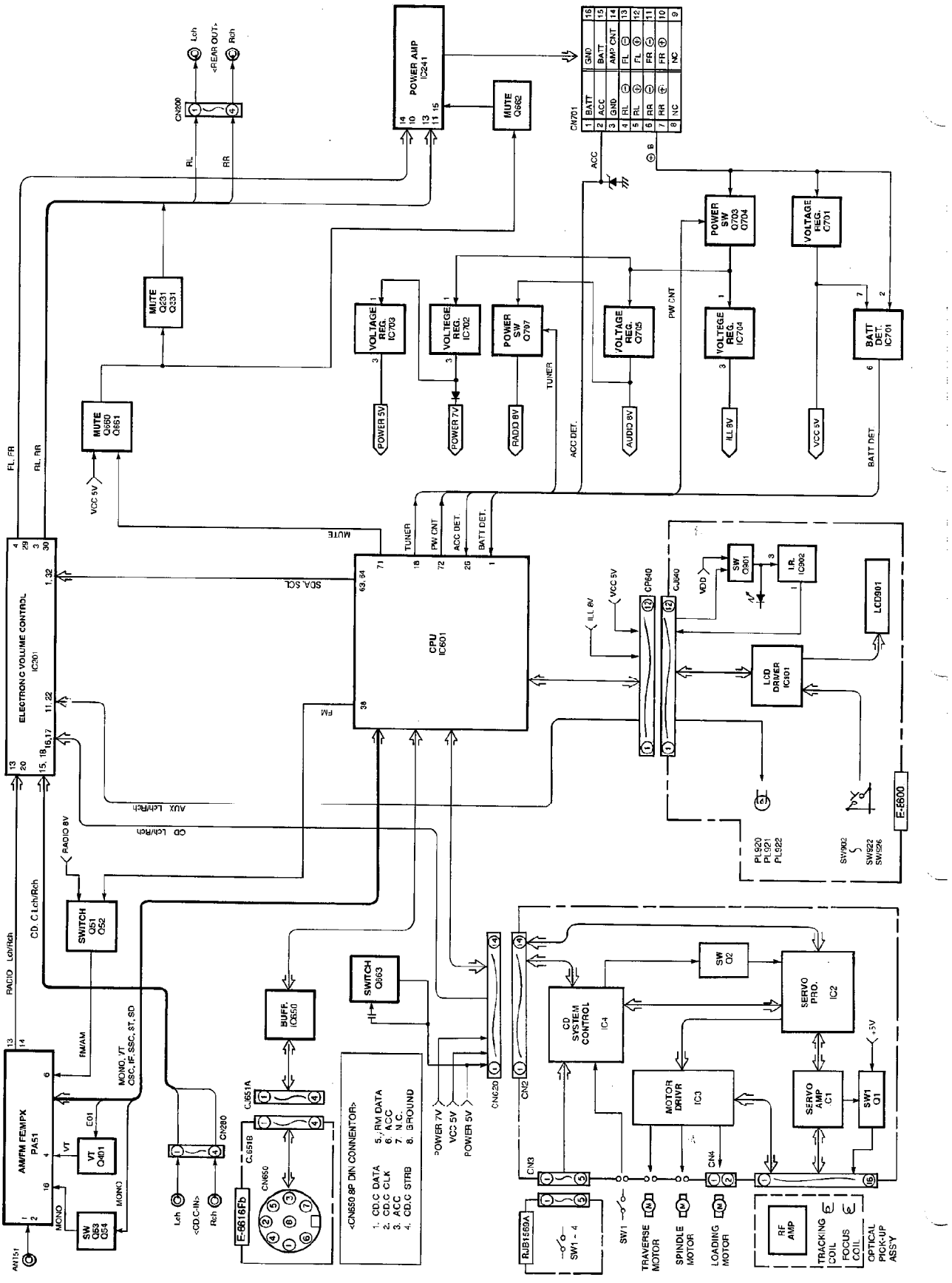


<Note> :

▭ ·····This mark shows a Ref. No. of connector

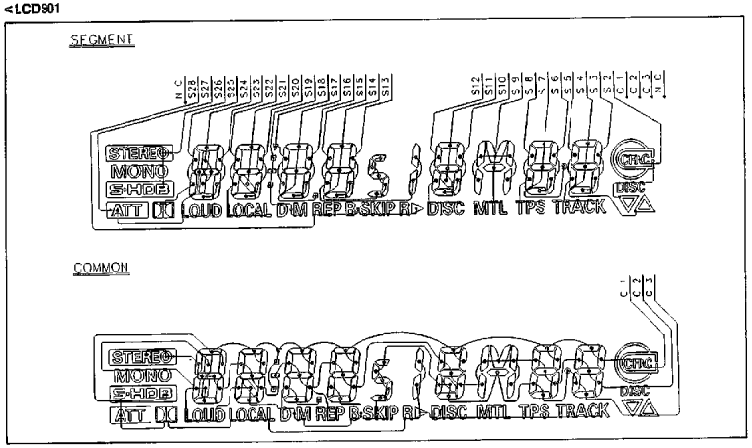
┌ ─ ┐ ·····This mark shows a mounting position of connector.

BLOCK DIAGRAM MODEL CQ-DP33EW

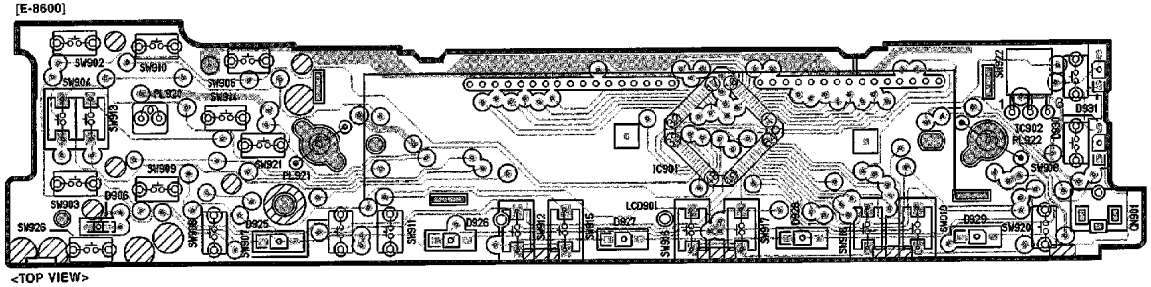


WIRING DIAGRAM (Display Block) MODEL CQ-DP33EW

<LCD901



[E-8600]



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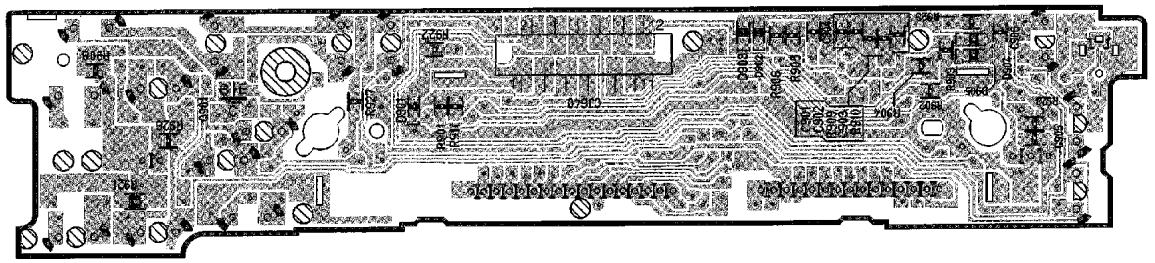
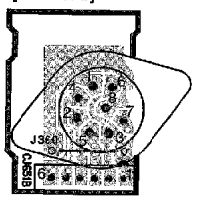


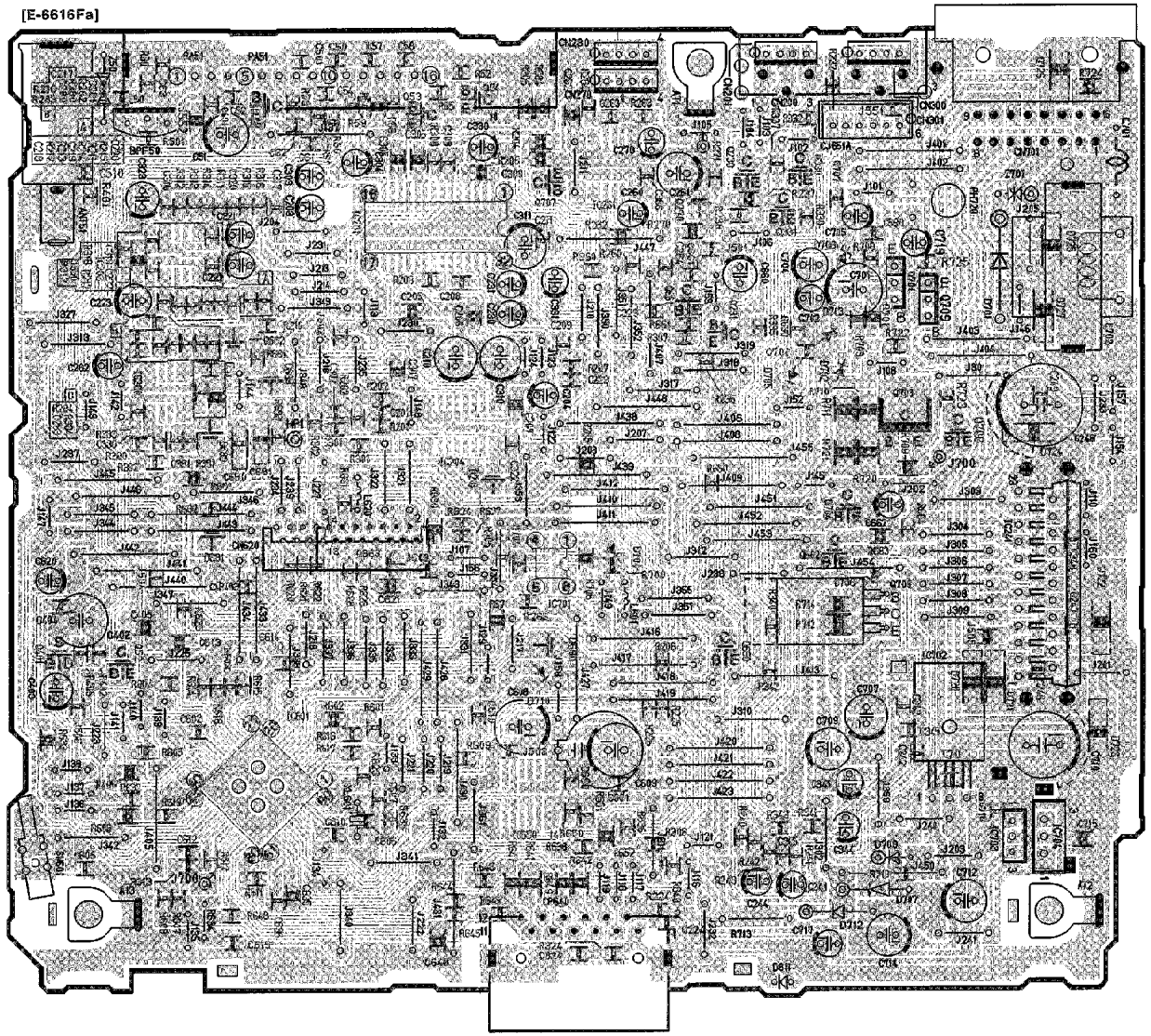
<BOTTOM VIEW>

WIRING DIAGRAM (Main Block) MODEL CQ-DP33EW

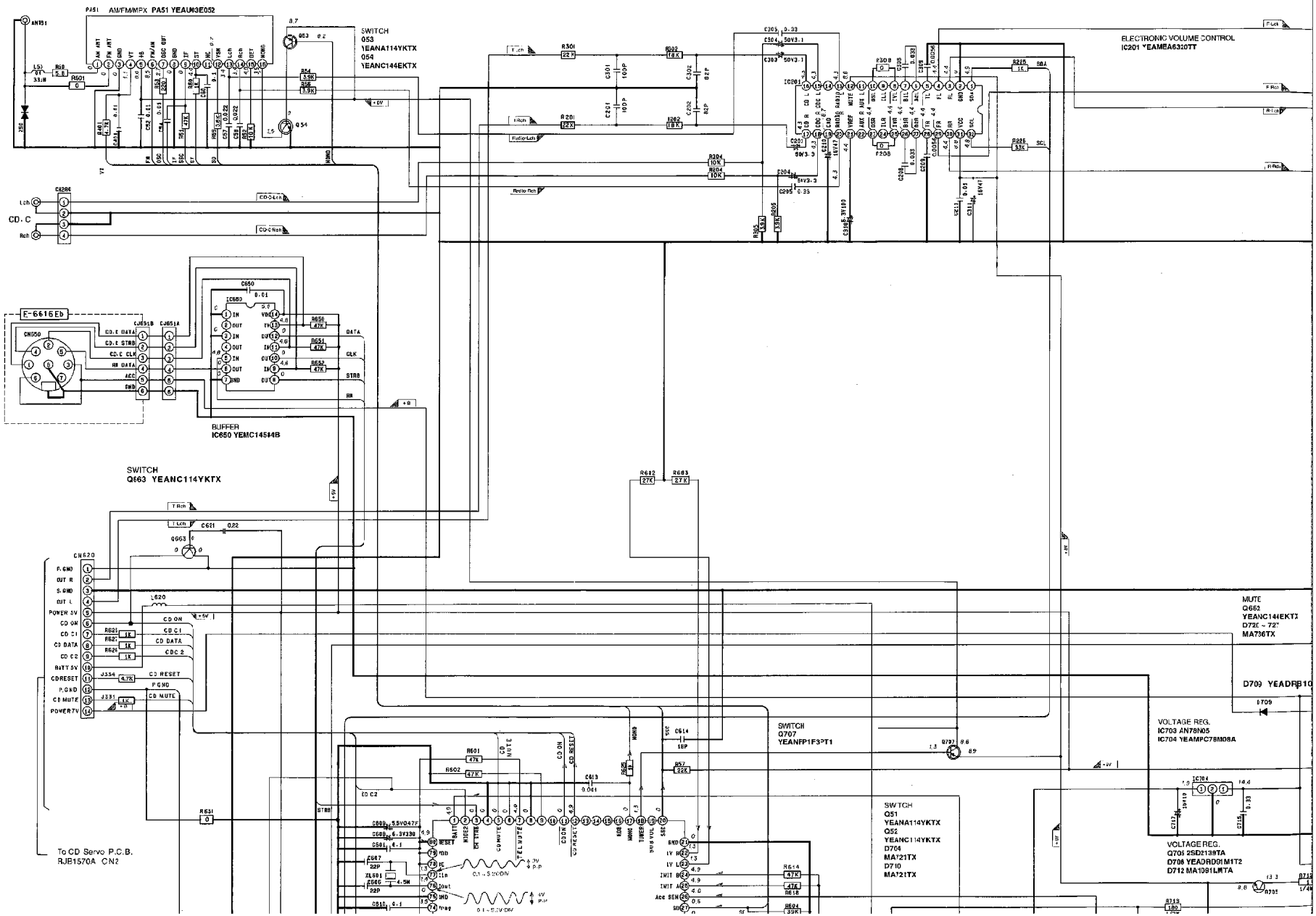
[E-6616Fb]

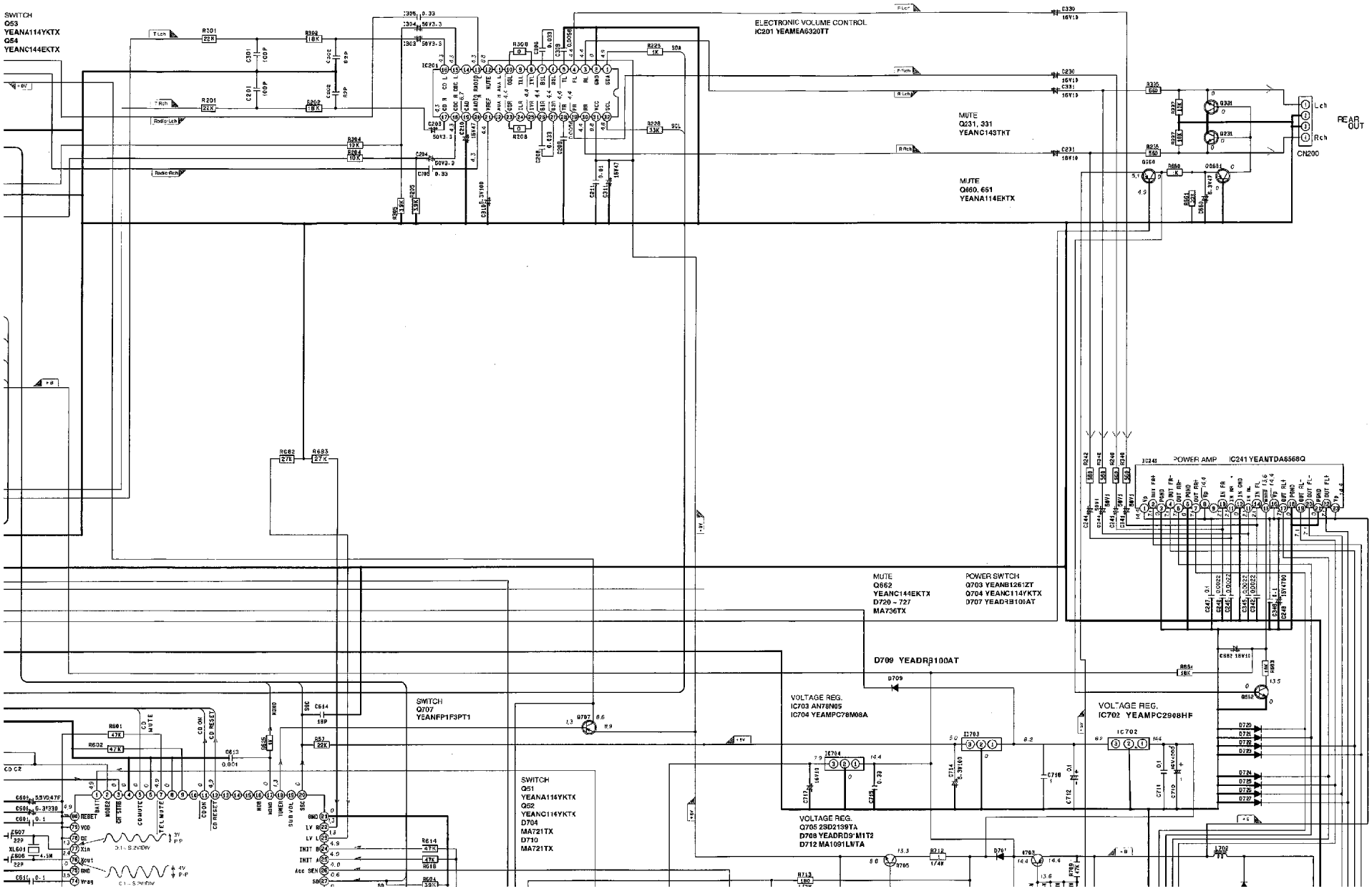


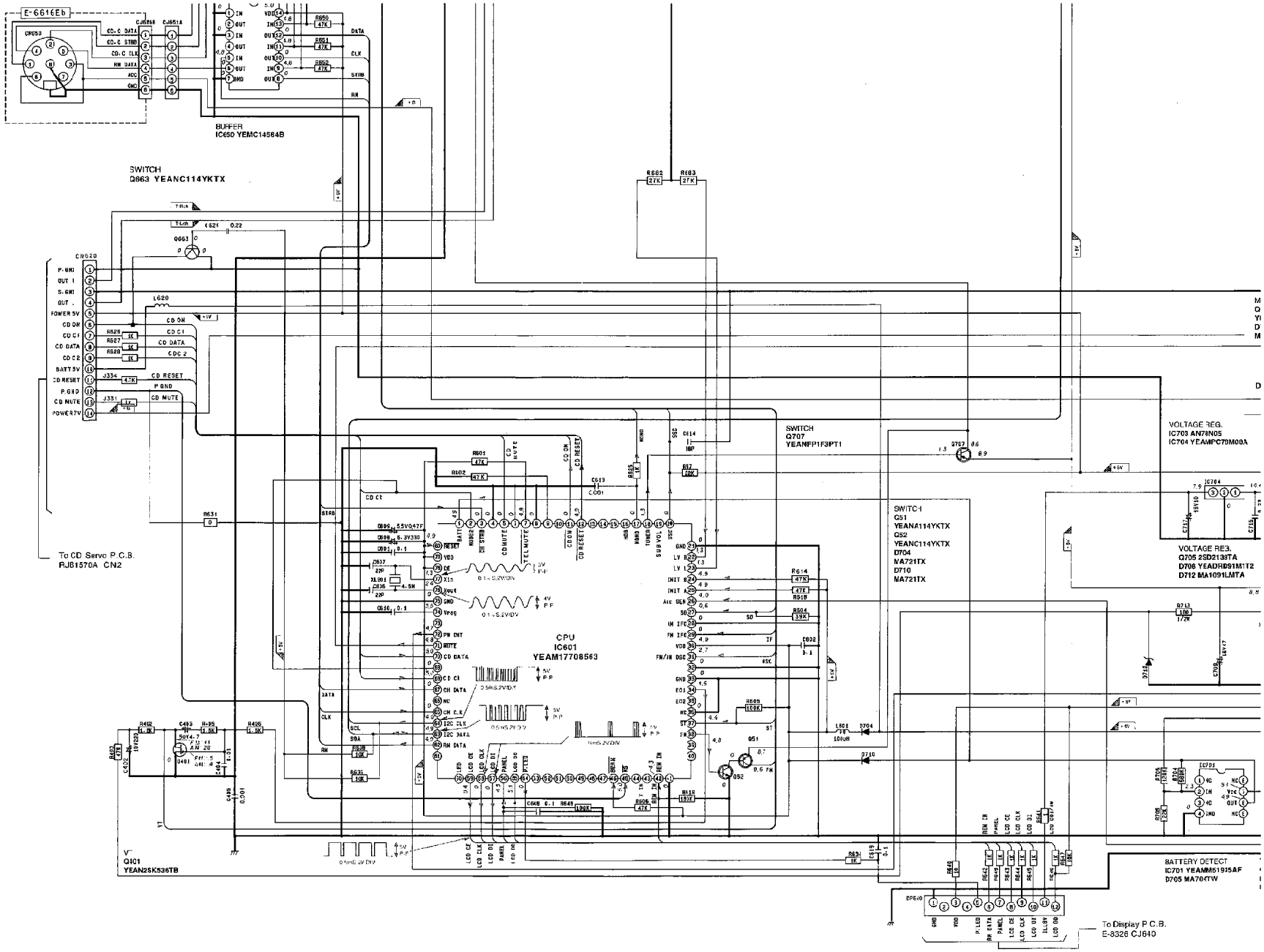
[E-6616Fa]

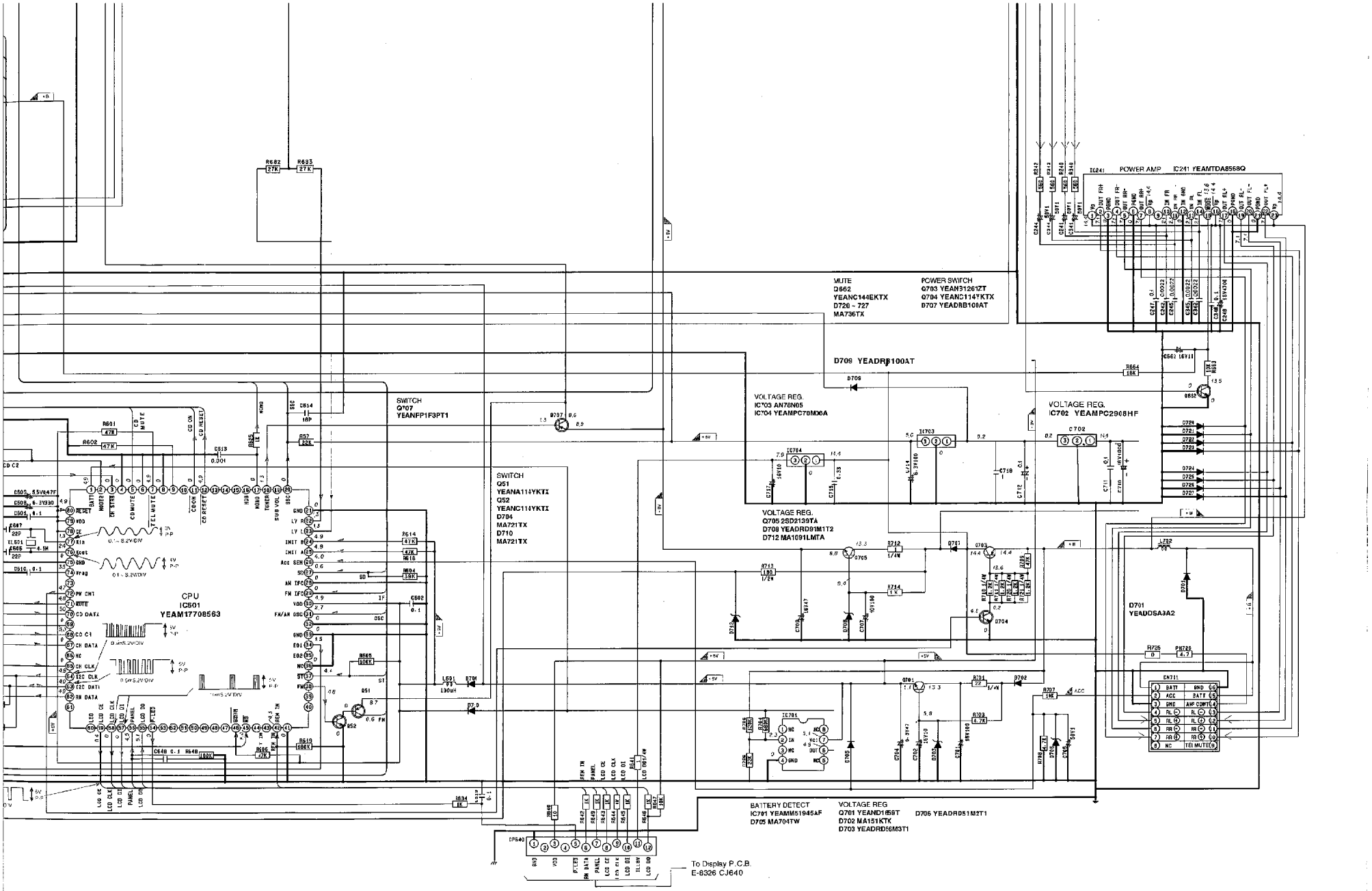


SCHEMATIC DIAGRAM (Main Block) MODEL CQ-DP33EW

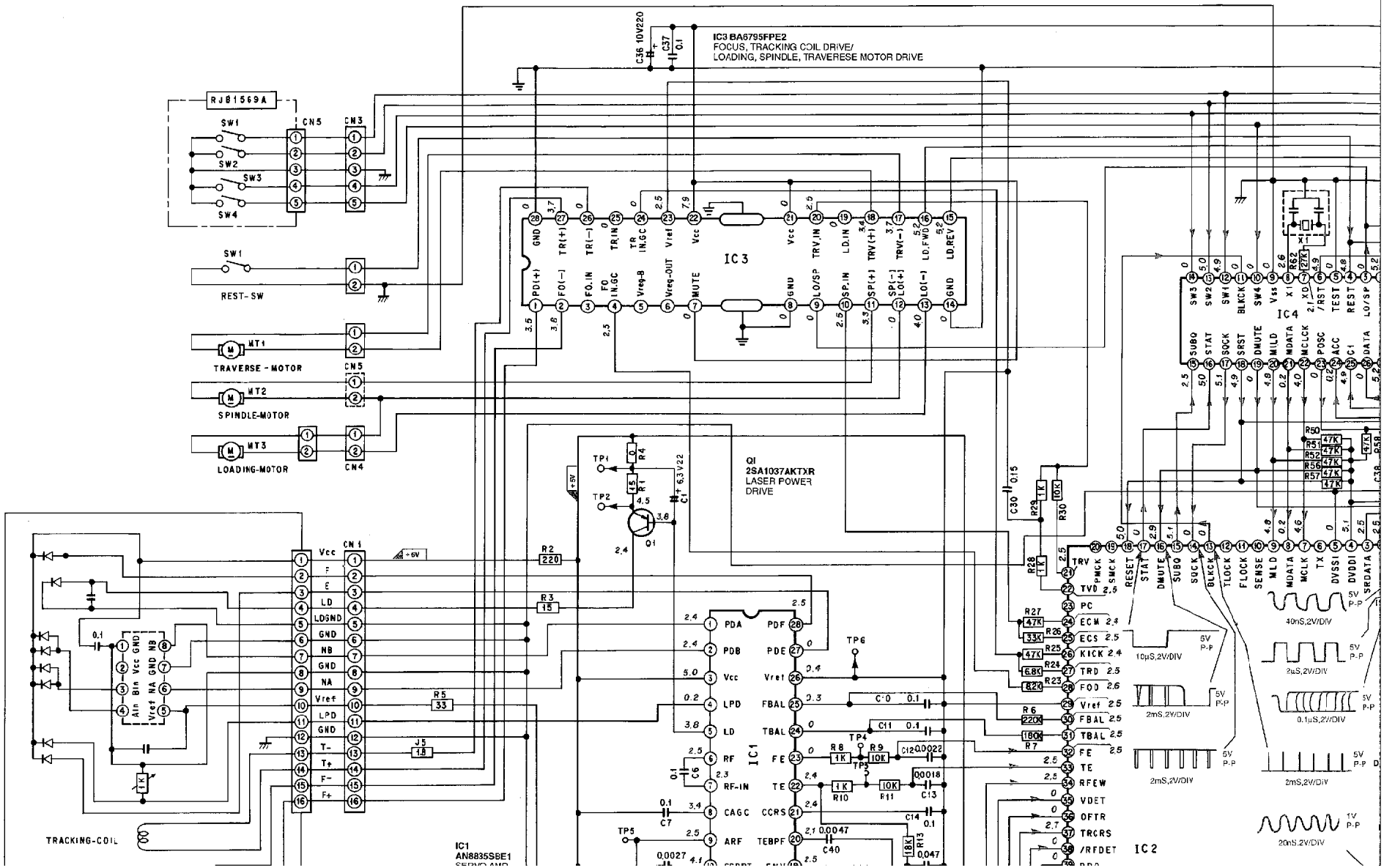



SWITCH
Q53
YEANA114YKTX
Q54
YEANC144EKTX
ELECTRONIC VOLUME CONTROL
IC201 YEAMEA6320TT
MUTE
Q231, 331
YEANC143TKT
MUTE
Q660, 661
YEANA114EKTX
REAR OUT
Lch
Rch
CN200
POWER AMP. IC241 YEANTDA6568Q
MUTE
Q662
YEANC144EKTX
D720 ~ 727
MA736TX
POWER SWITCH
Q703 YEANB1261ZT
Q704 YEANC114YKTX
D707 YEADRB100AT
D709 YEADRB100AT
SWITCH
Q707
YEANFP1F3PT1
VOLTAGE REG.
IC703 AN78N05
IC704 YEAMPC78M08A
VOLTAGE REG.
IC702 YEAMPC2908HF
SWITCH
Q51
YEANA114YKTX
Q52
YEANC114YKTX
D704
MA721TX
D710
MA721TX
VOLTAGE REG.
Q705 2SD2199TA
D708 YEADRD9'M1T2
D712 MA1091LWTA

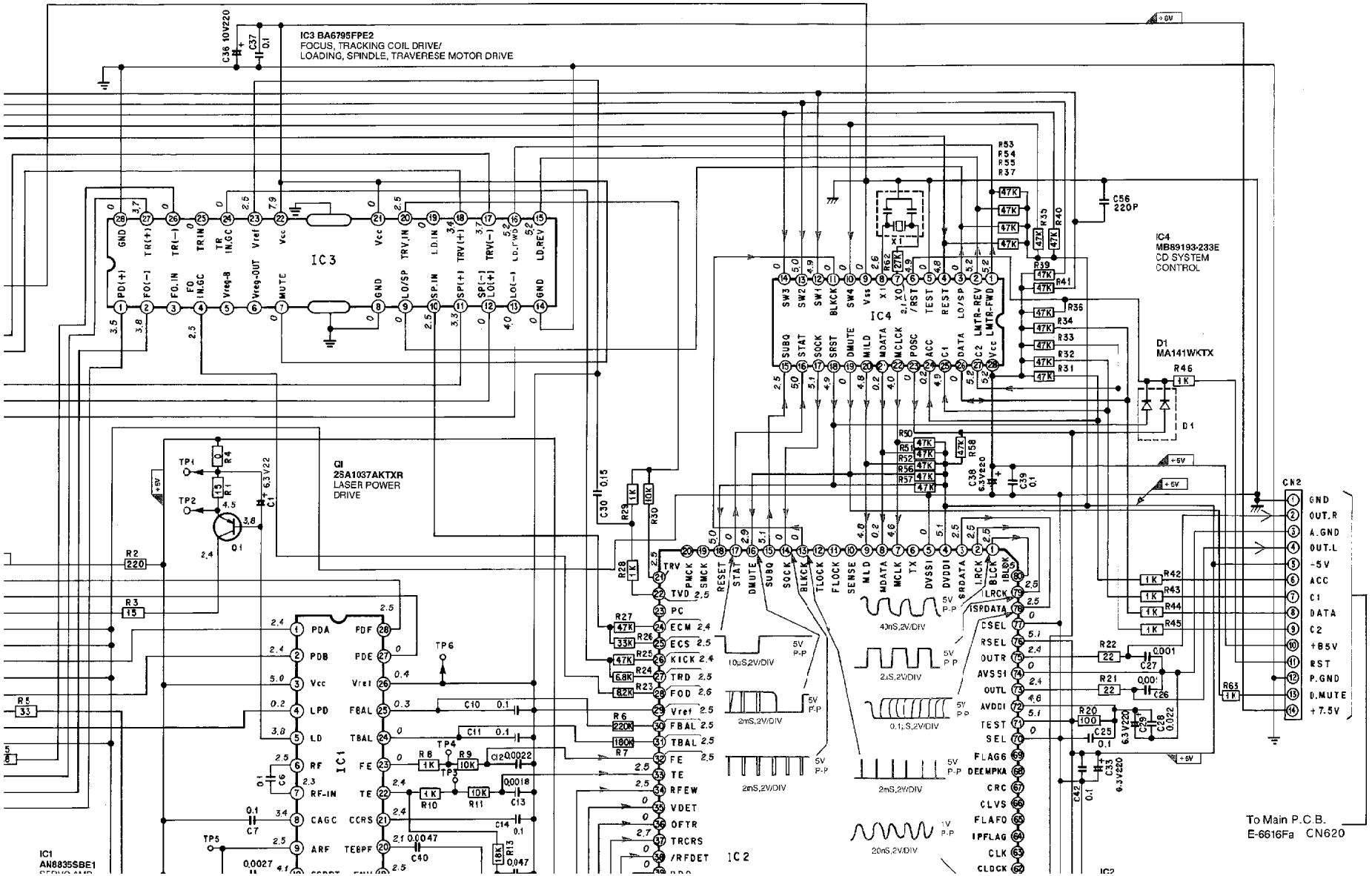

E-6616Eb
BUFFER
IC650 YEMC14564B
SWITCH
Q663 YEANC114YKTX
To CD Servo P.C.B.
RJB1570A CN2
CPU
IC601
YEAM17708563
SWITCH
Q707
YEANFP1F3PT1
SWITCH
Q51
YEANA114YKTX
Q52
YEANC114YKTX
D704
MA721TX
D710
MA721TX
VOLTAGE REG.
IC703 AN78N05
IC704 YEAMPC78M08A
VOLTAGE REG.
Q705 2SD2139TA
D708 YEADHB91M1T2
D712 MA1091LMTA
BATTERY DETECT
IC701 YEAMM51915AF
D705 MA704TW
Q401
YEAN25K536TB
To Display P.C.B.
E-8326 CJ640

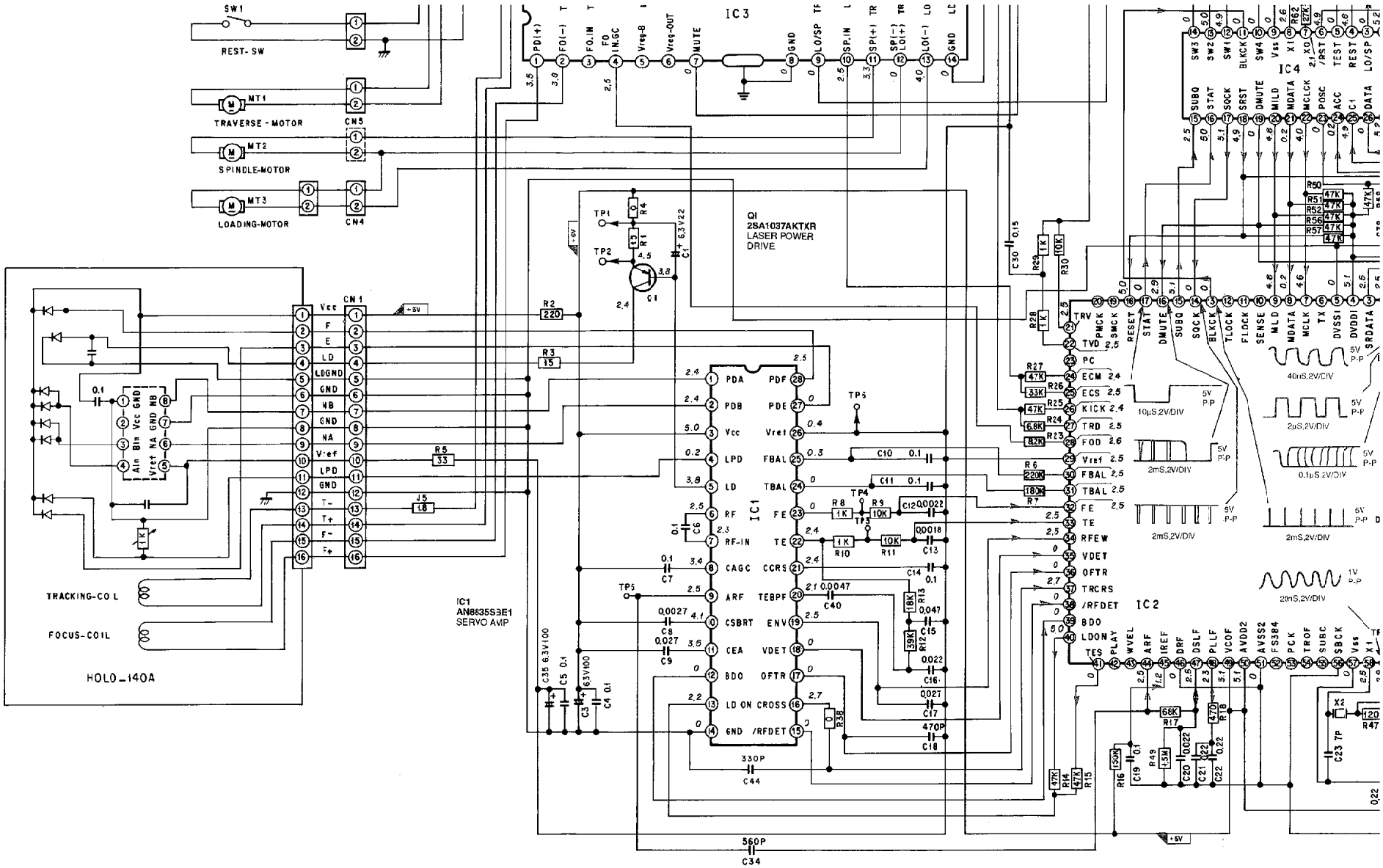

CPU
IC501
YEAM17708563
SWITCH
Q707
YEANFP1F3PT1
SWITCH
Q51
YEANA114YKTX
Q52
YEANC114YKTX
D704
MA721TX
D710
MA721TX
MUTE
D862
YEANC144EKTX
D720 - 727
MA736TX
POWER SWITCH
Q703 YEAN31261ZT
Q704 YEANC114YKTX
D707 YEADRB100AT
D709 YEADRB100AT
VOLTAGE REG.
IC703 AN78N05
IC704 YEAMPC78M06A
VOLTAGE REG.
IC702 YEAMPC2908HF
VOLTAGE REG.
Q705 2SD2139TA
D708 YEADRD91M1T2
D712 MA1091LMTA
POWER AMP IC241 YEAMTDA8568Q
D701
YEADDSA3A2
BATTERY DETECT
IC701 YEAMM51945AF
D705 MA704TW
VOLTAGE REG.
Q701 YEAND155ST
D702 MA151KTK
D703 YEADRD56M3T1
D706 YEADRD51M2T1
To Display P.C.B.
E-6326 CJ640

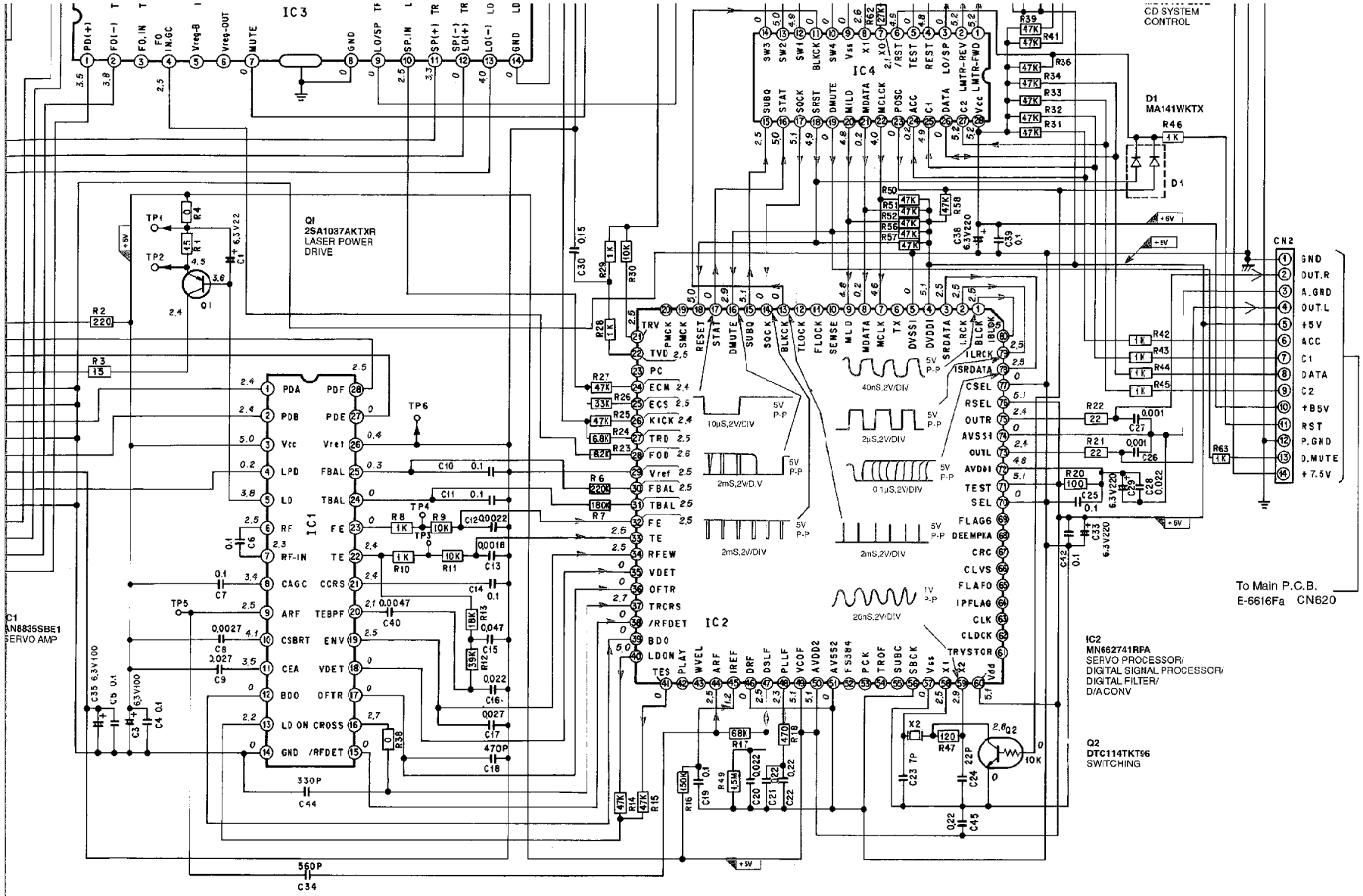
SCHEMATIC DIAGRAM (CD Servo Block) MODEL CQ-DP33EW



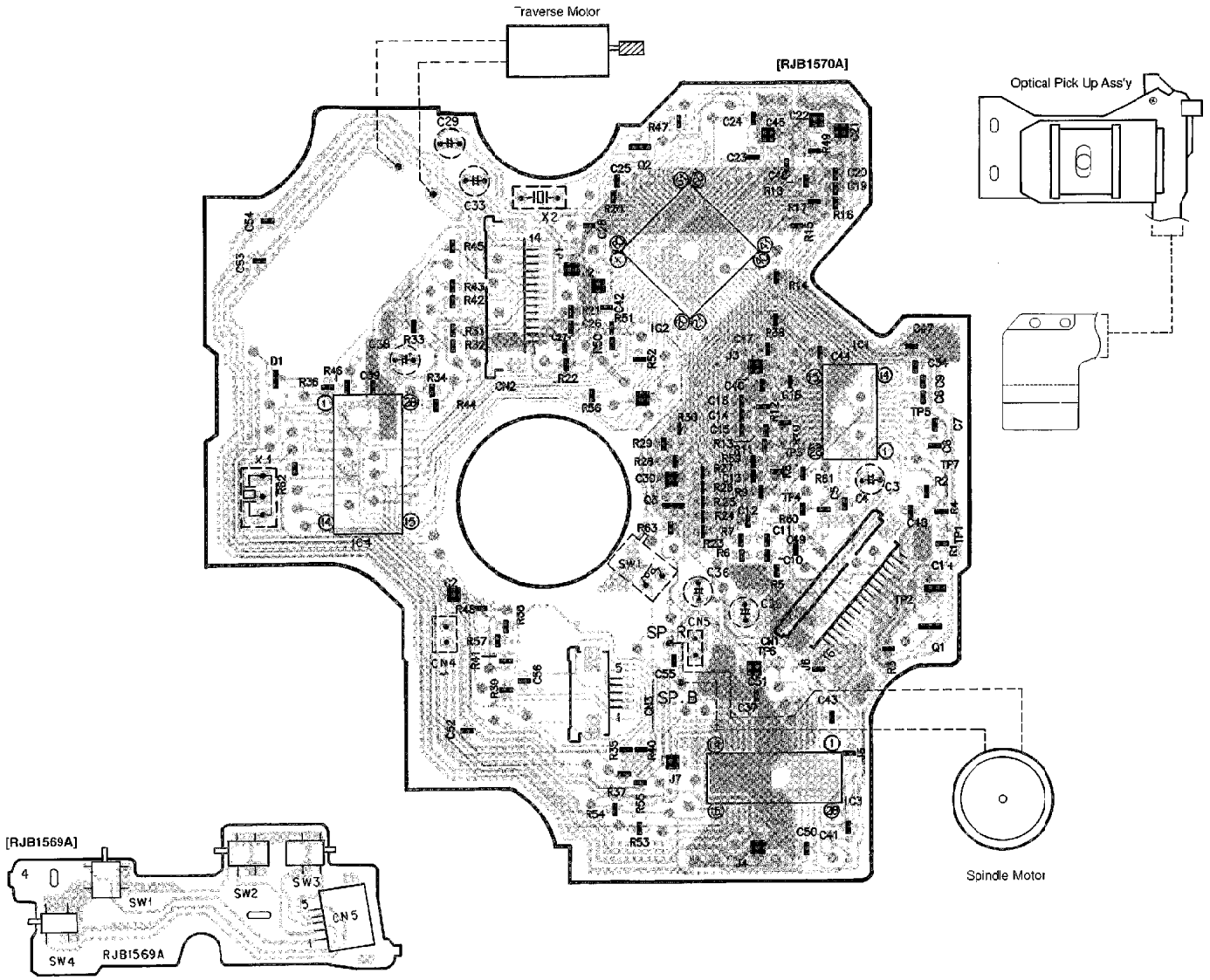
DP33EW


IC3 BA6795FPE2
FOCUS, TRACKING COIL DRIVE/
LOADING, SPINDLE, TRAVERESE MOTOR DRIVE
IC3
IC4
MB89193-233E
CD SYSTEM
CONTROL
D1
MA141WKTX
GI
2SA1037AKTXR
LASER POWER
DRIVE
IC1
AN8835SBE1
IC2
CN2
GND
OUT.R
A.GND
OUT.L
-5V
ACC
C1
DATA
C2
+B5V
RST
P.GND
D.MUTE
+7.5V
To Main P.C.B.
E-6616Fa CN620

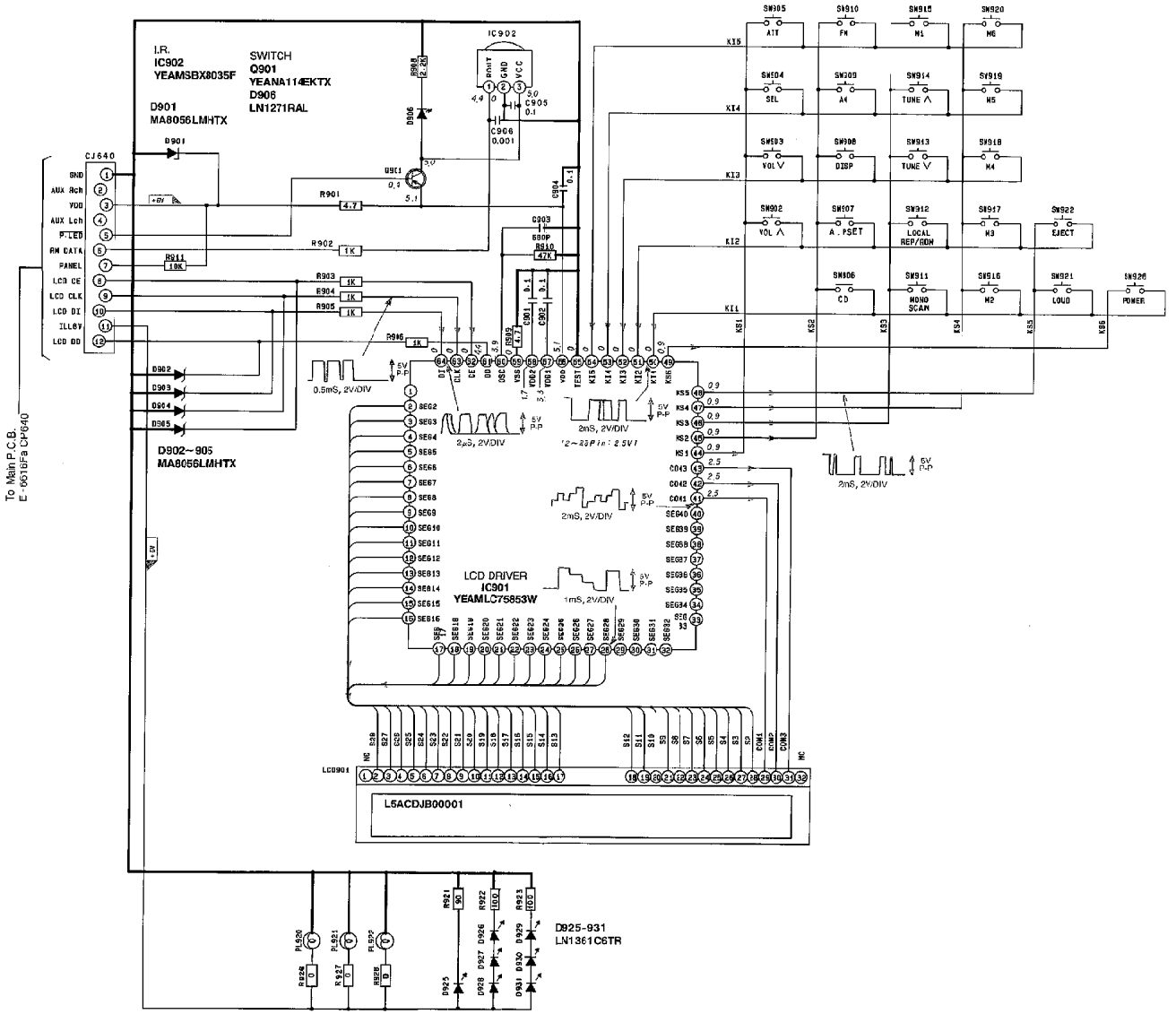

SW1
REST-SW
MT1
TRAVERSE-MOTOR
CN5
MT2
SPINDLE-MOTOR
MT3
LOADING-MOTOR
CN4
IC3
Q1
2SA1037AKTKR
LASER POWER
DRIVE
CN1
TRACKING-COIL
FOCUS-COIL
HOLO-140A
IC1
AN8835S3E1
SERVO AMP
IC4
IC2
10μS,2V/DIV
2mS,2V/DIV
0.1μS,2V/DIV
40mS,2V/DIV
20mS,2V/DIV


IC3
IC4
CD SYSTEM CONTROL
D1
MA141WKTX
Q1
2SA1037AKTXR
LASER POWER DRIVE
IC1
AN8835SBE1
SERVO AMP
IC2
MN662741RPA
SERVO PROCESSOR/ DIGITAL SIGNAL PROCESSOR/ DIGITAL FILTER/ D/A CONV
Q2
DTC114TKT96
SWITCHING
CN2
GND
OUT.R
A.GND
OUT.L
+5V
ACC
C1
DATA
C2
+B5V
RST
P.GND
D.MUTE
+7.5V
To Main P.C.B.
E-6616Fa CN620
10µS,2V/DIV
2mS,2V/DIV
40nS,2V/DIV
2µS,2V/DIV
0.1µS,2V/DIV
20nS,2V/DIV

WIRING DIAGRAM (CD Servo Block) MODEL CQ-DP33EW



SCHEMATIC DIAGRAM (Display Block) MODEL CQ-DP33EW



<CD Servo Block>

■ IC2 MN662741RPA

Pin No.	Port	Description	I/O	Vol.(V)
1	BCLK	Bit clock output	O	2.5
2	LRCK	L/R select output	O	2.5
3	SRDATA	Serial data output	O	2.5
4	DV_{DD1}	+5V digital power supply	—	5.1
5	DV_{SS1}	Digital ground	—	0
6	TX	Not used	—	—
7	MCLK	MPU command clock	I	4.6
8	MDATA	MPU command data	I	0.2
9	MLD	MPU command load	I	4.8
10	SENSE	Not used	—	—
11	/FLOCK	Not used	—	—
12	/TLOCK	Not used	—	—
13	BLKCK	Sub-code block clock	O	0
14	SQCK	Q code external clock	I	0
15	SUBQ	Q code output	O	5.1
16	DMUTE	Mute input	I	2.9
17	STAT	Status output	O	0
18	/RST	Reset input	I	5.0
19, 20		Not used	—	—
21	TRV	Forced traverse output	—	2.5
22	TVD	Traversed drive output	O	2.5
23	PC	Not used	—	—
24	ECM	Spindle motor drive	O	2.4
25	ECS	Spindle motor drive	O	2.5
26	KICK	Kick pulse output	O	2.4
27	TRD	Tracking drive	O	2.5
28	FOD	Focus drive	O	2.6
29	VREF	D/A reference voltage	I	2.5
30	FBAL	Focus balance adjust	O	2.5
31	TBAL	Tracking balance adjust	O	2.5
32	FE	Focus error signal	I	2.5
33	TE	Tracking error signal	I	2.5
34	RFENV	RF envelope signal	I	2.5
35	VDET	Vibration detection	I	0

Pin No.	Port	Description	I/O	Vol.(V)
36	OFTR	Off track signal	I	0
37	TRCRS	Track closs signal	I	2.7
38	/RFDET	RF detection signal	I	0
39	BDO	Drop out signal	I	0
40	LDON	Laser on/off control	O	5.0
41	TES	Tracking error shunt	O	0
42	PLAY	Not used	—	—
43	WVEL	Not used	—	—
44	ARE	RF signal	I	2.5
45	IREF	Reference current input	I	1.2
46	DRF	Connecting to ground	—	0
47	DSLF	DSL loop filter	I/O	2.5
48	PLLF	PLL loop filter	I/O	2.3
49	VCOF	Connecting to V_{DD}	—	5.1
50	AV_{DD2}	+5V analog power supply	—	5.1
51	AF_{SS2}	Analog ground	—	0
52~55		Not used	—	—
56	SBCK	(Connecting to ground)	—	0
57	V_{SS}	Ground	—	0
58	X1	Crystal oscillator	—	2.5
59	X2	Crystal oscillator	—	2.9
60	V_{DD}	+5V power supply	—	5.1
61~69		Not used	—	—
70	/RST2	Connecting to ground	—	0
71	/TEST	Connecting to V_{DD}	—	5.1
72	AV_{DD1}	+5V analog power supply	—	4.8
73	OUTL	Audio Lch output	O	2.4
74	AV_{SS1}	Analog ground	—	0
75	OUTR	Audio Rch output	O	2.4
76	RSEL	Connecting to V_{DD}	I	5.1
77	CSEL	Connecting to ground	—	0
78	ISRDATA	Serial data input	I	2.6
79	ILRCK	L/R select input	I	2.5
80	IBCLK	Bit clock input	I	2.5

■ IC4 MB89193-233E

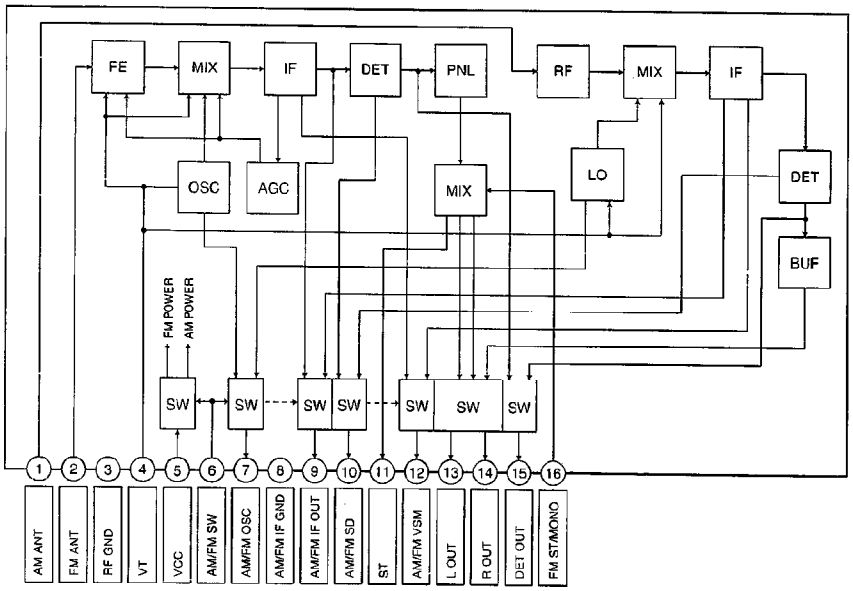
Pin. No	Port	Description	I/O	Vol. (V)
1	LMTR_FWD	Foward Limiter	O	5.2
2	LMTR_REV	Reverse Limiter	O	5.2
3	LO/SP	Motor control	O	0
4	REST	Reset	I	4.8
5	TEST	(Connecting to ground)	—	0
6	/RST	Reset	I	4.9
7	X0	Crystal oscillator	—	2.1
8	X1	Crystal oscillator	—	2.6
9	Vss	Ground	—	0
10	SW4	Switch input	I	0
11	BLKCK	Sub-code block clock	I	0
12	SW1	Switch input	I	4.9
13	SW2	Switch input	I	5.0
14	SW3	Switch input	I	0

Pin. No	Port	Description	I/O	Vol. (V)
15	SUBQ	Q code input	I	2.5
16	STAT	Status input	I	5.0
17	SQCK	Q code external clock	O	5.1
18	SRST	Reset output	O	4.9
19	DMUTE	Mute output	O	0
20	MLD	MPU command load	O	4.8
21	MDATA	MPU command data	O	0.2
22	MCLCK	MPU command clock	O	4.6
23	POSC	Oscillator control	O	0
24	ACC	ACC input	I	0.2
25	C1	CD clock	I	4.9
26	DATA	CD data	I/O	0
27	C2	CD clock	I	5.2
28	Vcc	+5V power supply	—	5.2

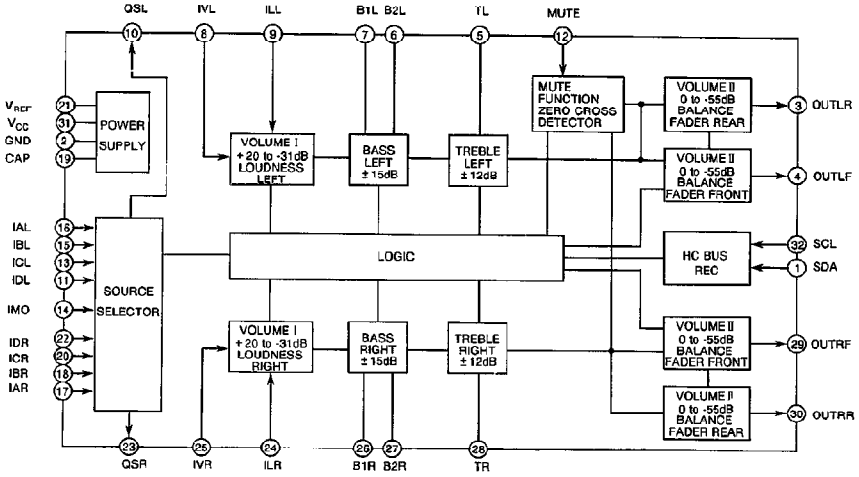
PACKAGE AND IC BLOCK DIAGRAM

<Main Block>

● **PA51 YEAU03E052**

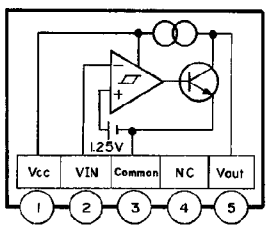


● **IC201 YEAMEA6320TT**



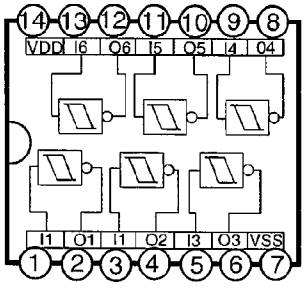
● **IC701**

YEAMM51945AF



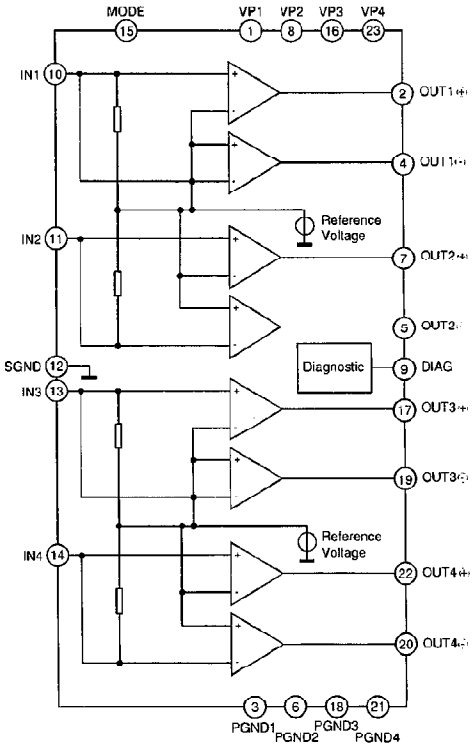
● **IC650**

YEAMC14584BE



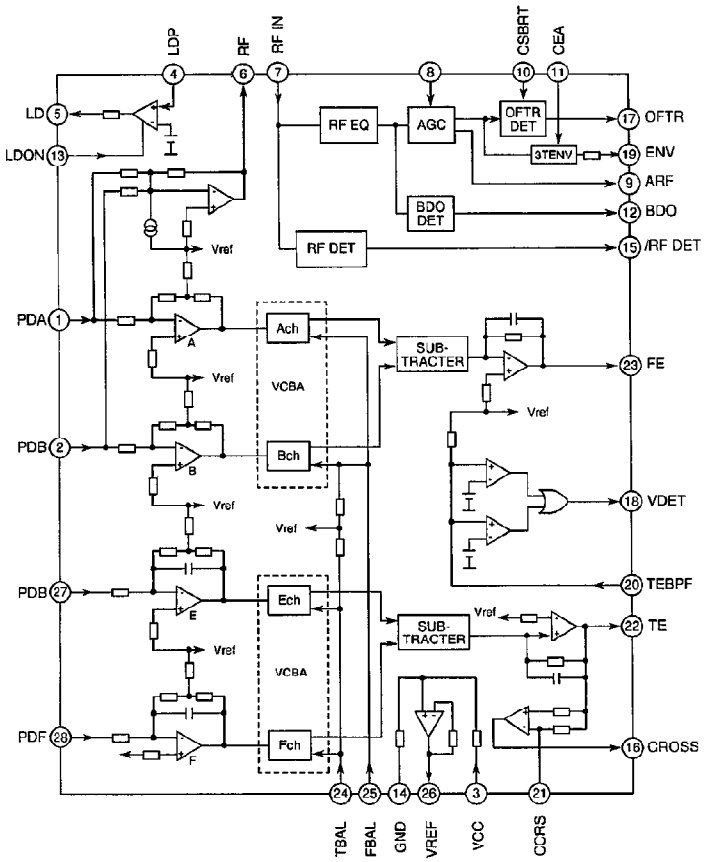
● **IC241**

YEAMTDA8568Q



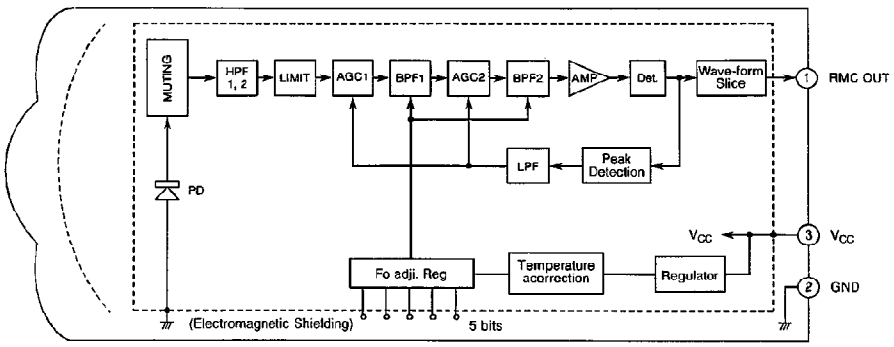
<CD Servo Block>

● **IC1 AN8835SBE1**

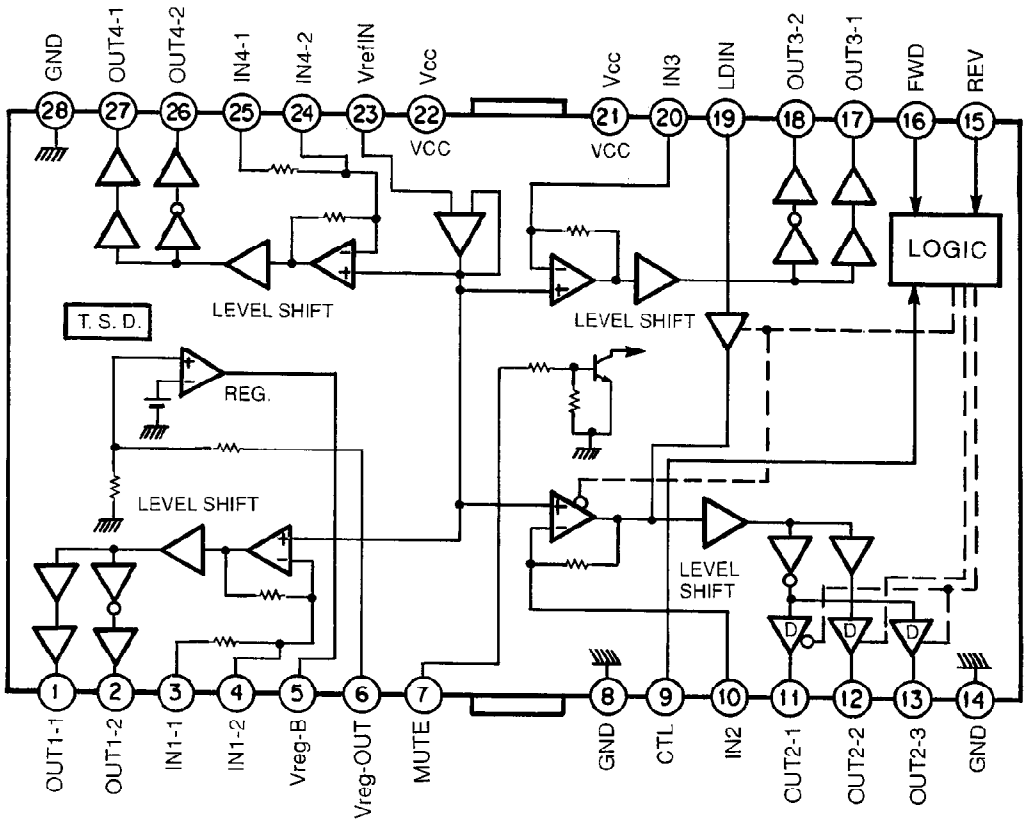


<Display Block>

● **IC902 YEAMSBX8035F**



● IC3 BA6795FPE2



1 REPLACEMENT PARTS LIST

Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a load map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

1.1. IC`s and Transistors

MAIN BLOCK [E6616F]

Ref. No.	Part No.	Part Name & Description	Remarks
IC201	YEAMEA6320TT	IC	
IC241	YEAMTDA8568Q	IC	
IC601	YEAM17708563	IC	
IC650	YEAMC14584BE	IC	
IC701	YEAMM51945AF	IC	
IC702	YEAMPC2908HF	IC	
IC703	AN78N05	IC	
IC704	YEAMPC78M08A	IC	
PA51	YEAU03E052C	Electronic Tuner	
Q51	YEANA114YKTX	Transistor	
Q52	YEANC114YKT	Transistor	
Q53	YEANA114YKTX	Transistor	
Q54	YEANC144EKT	Transistor	
Q231	YEANC143TKT	Transistor	
Q331	YEANC143TKT	Transistor	
Q401	YEAN2SK536TB	Transistor	
Q660	YEANA114EKTX	Transistor	
Q661	YEANA114EKTX	Transistor	
Q662	YEANC144EKT	Transistor	
Q663	YEANC114YKT	Transistor	
Q701	YEAND1859T	Transistor	
Q703	YEANB1261ZT	Transistor	
Q704	YEANC114YKT	Transistor	
Q705	2SD2139TA	Transistor	
Q707	YEANFP1F3PT1	Transistor	

DISPLAY BLOCK [E8600]

Ref. No.	Part No.	Part Name & Description	Remarks
IC901	YEAMLC75853W	IC	
IC902	YEAMSBX8035F	IC	
Q901	YEANA114EKTX	Transistor	

1.2. Diodes

MAIN BLOCK [E6616F]

Ref. No.	Part No.	Part Name & Description	Remarks
D701	YEADDSA3A2	Diode	
D702	MA151K	Diode	
D703	YEADRD56M3T1	Diode	
D704	MA721TX	Diode	
D705	MA704TW	Diode	
D706	YEADRD51M2T1	Diode	
D707	YEADRB100AT	Diode	
D708	YEADRD91M1T2	Diode	
D709	YEADRB100AT	Diode	
D710	MA721TX	Diode	
D712	MA1091LMTA	Diode	
D720	MA736TX	Diode	
D721	MA736TX	Diode	
D722	MA736TX	Diode	
D723	MA736TX	Diode	
D724	MA736TX	Diode	
D725	MA736TX	Diode	
D726	MA736TX	Diode	
D727	MA736TX	Diode	

DISPLAY BLOCK [E8600]

Ref. No.	Part No.	Part Name & Description	Remarks
D901	MA8056LMHTX	Diode	
D902	MA8056LMHTX	Diode	
D903	MA8056LMHTX	Diode	
D904	MA8056LMHTX	Diode	
D905	MA8056LMHTX	Diode	
D906	LN1271RAL	LED	
D925	LN1361C6TR	LED	
D926	LN1361C6TR	LED	
D927	LN1361C6TR	LED	
D928	LN1361C6TR	LED	
D929	LN1361C6TR	LED	
D930	LN1361C6TR	LED	
D931	LN1361C6TR	LED	

1.3. Capacitors

MAIN BLOCK [E6616F]

Ref. No.	Part No.	Part Name & Description	Remarks
C52	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C54	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C57	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C58	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C60	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C201	YECUS1H101JM	Ceramic, 100PF 50WV	
C202	YECUS1H820JM	Ceramic, 82PF 50WV	
C203	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C204	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C205	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C208	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C209	YECUS1H562KX	Ceramic, 0.0056µF 50WV	
C210	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C211	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C230	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C231	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C241	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C242	YECUS1H222KX	Ceramic, 0.0022µF 50WV	
C244	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C245	YECUS1H222KX	Ceramic, 0.0022µF 50WV	
C247	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C248	ECA1CDT472Y	Electrolytic, 4700µF 16WV	
C301	YECUS1H101JM	Ceramic, 100PF 50WV	
C302	YECUS1H820JM	Ceramic, 82PF 50WV	
C303	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C304	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C305	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C308	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C309	YECUV2A562KX	Ceramic, 0.0056µF 100WV	
C310	ECEA0JKA101I	Electrolytic, 100µF 6.3WV	
C311	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C330	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C331	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C341	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C342	YECUS1H222KX	Ceramic, 0.0022µF 50WV	
C344	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C345	YECUS1H222KX	Ceramic, 0.0022µF 50WV	
C348	YECUS1E104ZF	Ceramic, 0.1µF 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C401	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C402	ECEA1AKA221	Electrolytic, 220µF 10WV	
C403	ECEA1HKA4R7I	Electrolytic, 4.7µF 50WV	
C404	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C405	YECUV2A102KX	Ceramic, 0.001µF 100WV	
C601	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C602	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C606	YECUS1H220JM	Ceramic, 22PF 50WV	
C607	YECUS1H220JM	Ceramic, 22PF 50WV	
C608	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C609	EECS5R5H473	Electrolytic, 0.047F 5.5WV	
C610	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C613	YECUV2A102KX	Ceramic, 0.001µF 100WV	
C614	YECUS1H180JC	Ceramic, 18PF 50WV	
C619	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C621	YECUV1C224KX	Ceramic, 0.22µF 16WV	
C648	YECUV1H104ZF	Ceramic, 0.1µF 50WV	
C650	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C660	ECEA0JKA470I	Electrolytic, 47µF 6.3WV	
C662	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C701	ECEA1CKA101	Electrolytic, 100µF 16WV	
C702	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C704	ECEA0JKA470I	Electrolytic, 47µF 6.3WV	
C705	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C707	ECEA1AKA101I	Electrolytic, 100µF 10WV	
C709	ECEA1CKS470I	Electrolytic, 47µF 16WV	
C710	ECA1CDT102BQ	Electrolytic, 1000µF 16WV	
C711	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C712	ECEA1AKA101I	Electrolytic, 100µF 10WV	
C714	ECEA0JKA101I	Electrolytic, 100µF 6.3WV	
C715	YECUV1E334ZF	Ceramic, 0.33µF 25WV	
C717	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C718	YECUS1C105ZF	Ceramic, 1µF 16WV	

DISPLAY BLOCK [E8600]

Ref. No.	Part No.	Part Name & Description	Remarks
C901	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C902	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C903	YECUS1H681JM	Ceramic, 680PF 50WV	
C904	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C905	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C906	YECUS1H102KX	Ceramic, 0.001µF 50WV	

1.4. Resistors

MAIN BLOCK [E6616F]

Ref. No.	Part No.	Part Name & Description	Remarks
J331	ERD25TJ102	Carbon, 1kΩ 1/4W	
J334	ERD25TJ472	Carbon, 4.7kΩ 1/4W	
J502	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
J503	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
J504	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
J505	ERJ8GX0R00V	Chip, 0Ω 1/8W	
J506	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
J509	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
J550	ERJ8GEY0R00V	Chip, 0Ω 1/8W	
J552	ERJ8GEY0R00V	Chip, 0Ω 1/8W	
R50	ERJ6GEYJ5R6	Chip, 5.6Ω 1/10W	
R51	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R52	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R53	ERJ6GEYJ221	Chip, 220Ω 1/10W	
R54	ERJ8GEYJ392V	Chip, 3.9kΩ 1/8W	
R56	ERJ6GEYJ392	Chip, 3.9kΩ 1/10W	
R57	ERJ8GEYJ223V	Chip, 22kΩ 1/8W	
R59	ERJ6GEYJ562	Chip, 5.6kΩ 1/10W	
R60	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R201	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R202	ERJ6GEYJ183	Chip, 18kΩ 1/10W	
R204	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R205	ERJ8GEYJ392V	Chip, 3.9kΩ 1/8W	
R208	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R225	ERJ6GEYJ102	Chip, 1kΩ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R226	ERJ6GEYJ333	Chip, 33kΩ 1/10W	
R235	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R237	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R240	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R242	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R301	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R302	ERJ6GEYJ183	Chip, 18kΩ 1/10W	
R304	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R305	ERJ8GEYJ392V	Chip, 3.9kΩ 1/8W	
R308	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R335	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R337	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R340	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R342	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R401	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R402	ERJ6GEYJ152	Chip, 1.5kΩ 1/10W	
R403	ERJ6GEYJ471	Chip, 470Ω 1/10W	
R405	ERJ6GEYJ152	Chip, 1.5kΩ 1/10W	
R406	ERJ8GEYJ152V	Chip, 1.5kΩ 1/8W	
R501	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R601	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R602	ERJ8GEYJ473V	Chip, 47kΩ 1/8W	
R604	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R605	ERJ6GEYJ104	Chip, 100kΩ 1/10W	
R606	ERJ8GEYJ473V	Chip, 47kΩ 1/8W	
R614	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R618	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R619	ERJ6GEYJ184	Chip, 180kΩ 1/10W	
R625	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R626	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R627	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R628	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R631	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R634	ERD52TJ102	Carbon, 1kΩ 1/4W	
R636	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R638	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R640	ERJ6GEYJ100	Chip, 10Ω 1/10W	
R641	ERJ14YJ1R0H	Chip, 1Ω 1/4W	
R642	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R643	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R644	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R645	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R646	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R647	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R648	ERJ6GEYJ104	Chip, 100kΩ 1/10W	
R649	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R650	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R651	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R652	ERJ8GEYJ473V	Chip, 47kΩ 1/8W	
R660	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R661	ERJ6GEYJ393	Chip, 39kΩ 1/10W	
R663	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R664	ERJ6GEYJ183	Chip, 18kΩ 1/10W	
R682	ERJ6GEYJ273	Chip, 27kΩ 1/10W	
R683	ERJ6GEYJ273	Chip, 27kΩ 1/10W	
R701	ERJ8GEYJ220V	Chip, 22Ω 1/8W	
R703	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R704	ERJ6GEYJ684	Chip, 680kΩ 1/10W	
R705	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R706	ERJ8GEYJ124V	Chip, 120kΩ 1/8W	
R707	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R708	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R709	ERJ8GEYJ473V	Chip, 47kΩ 1/8W	
R710	ERJ14YJ122H	Chip, 1.2kΩ 1/4W	
R711	ERJ14YJ122H	Chip, 1.2kΩ 1/4W	
R712	ERJ14YJ1R0H	Chip, 1Ω 1/4W	
R713	ERDS1FJ181	Carbon, 180Ω 1/2W	
R714	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R720	ERJ14YJ122H	Chip, 1.2kΩ 1/4W	
R721	ERJ14YJ122H	Chip, 1.2kΩ 1/4W	
R725	ERJ6GEY0R00V	Chip, 0Ω 1/10W	

DISPLAY BLOCK [E8600]

Ref. No.	Part No.	Part Name & Description	Remarks
R901	ERJ6GEYJ4R7	Chip, 4.7Ω 1/10W	
R902	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R903	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R904	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R905	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R906	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R908	ERJ6GEYJ222	Chip, 2.2kΩ 1/10W	
R909	ERJ6GEYJ4R7	Chip, 4.7Ω 1/10W	
R910	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R911	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R921	ERJ8GEYJ391V	Chip, 390Ω 1/8W	
R922	ERJ6GEYJ101	Chip, 100Ω 1/10W	
R923	ERJ6GEYJ101	Chip, 100Ω 1/10W	
R926	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R927	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R928	ERJ6GEY0R00V	Chip, 0Ω 1/10W	

1.5. Connectors

MAIN BLOCK [E6616F]

Ref. No.	Part No.	Part Name & Description	Remarks
CJ651	YEAETSBP0607	Connector, 6P	
CN200	YEAE02165	Connector, 2P RCA	
CN280	YEAE012503	Connector, 1P RCA	
CN620	YEAE012763	Connector, 14P	
CN650	YEAE012307	Connector, 8P DIN	
CN701	YEAE012194	Connector, 16P	
CP640	YEAE012475	Connector, 12P	
CP1	YEAET14B140C	Connector, 14P FFC	

DISPLAY BLOCK [E8600]

Ref. No.	Part No.	Part Name & Description	Remarks
CJ640	YEAE012476	Connector, 12P	

1.6. Electric Parts

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW902	EVQPJH05K	Switch	
SW903	EVQPJH05K	Switch	
SW904	YEAS09312	Switch	
SW905	EVQPJH05K	Switch	
SW906	EVQPJH05K	Switch	
SW907	EVQPJH05K	Switch	
SW908	EVQPJH05K	Switch	
SW909	EVQPJH05K	Switch	
SW910	EVQPJH05K	Switch	
SW911	EVQPJH05K	Switch	
SW912	YEAS09312	Switch	
SW913	YEAS09312	Switch	
SW914	EVQPJH05K	Switch	
SW915	YEAS09312	Switch	
SW916	YEAS09312	Switch	
SW917	YEAS09312	Switch	
SW918	YEAS09312	Switch	
SW919	YEAS09312	Switch	
SW920	EVQPJH05K	Switch	
SW921	EVQPJH05K	Switch	
SW922	EVQPJH05K	Switch	
SW926	EVQPJH05K	Switch	

CRYSTAL

Ref. No.	Part No.	Part Name & Description	Remarks
XL601	YEXL49U0450T	Crystal OSC	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L50	YELT02M330KT	Coil	
L601	YELT02C101KT	Coil	
L620	YELT02C101KT	Coil	
L702	YETQ026F143	Coil	

LCD

Ref. No.	Part No.	Part Name & Description	Remarks
LCD901	L5ACDJB00001	LCD Display	

LAMPS

Ref. No.	Part No.	Part Name & Description	Remarks
Z50	YEAL02007	Neon Lamp	
PL920	YEAL01225	Pilot Lamp	
PL921	YEAL01225	Pilot Lamp	
PL922	YEAL01225	Pilot Lamp	

THERMISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
PH720	YERT7AR4R7MT	Thermistor	

1.7. Accessories

PRINTING

Ref. No.	Part No.	Part Name & Description	Remarks
	YGEM282970	Operating Instructions	

INSTALLATION PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
	YEAJ02765	Power Cord	
	YEFG04019	Rear Support Strap	
	YEFX0214198	Mounting Collar	

1.8. Mechanical Parts

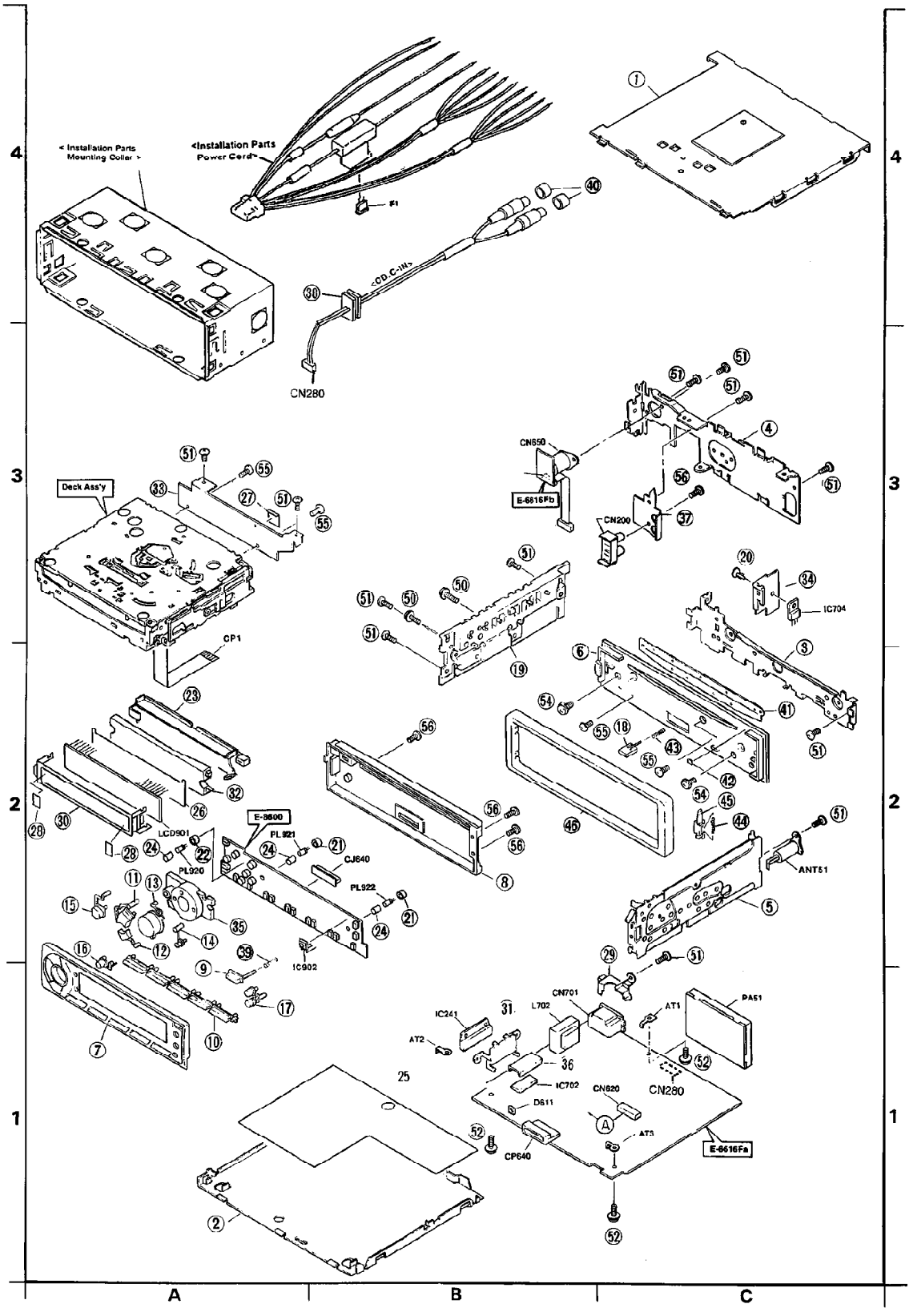
MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
F1 ⚠	YEAF02015	Fuse, 15A	
ANT51	YEAA10090	Antenna Receptacle	
AT1-3	YEAT03420	Terminal	
1	YEFA031359D	Upper Cover	(4-C)
2	YEFA05594B	Bottom Cover	(1-B)
3	YEFA07427	Front Plate	(2-C)
4	YEFA08404BK	Rear Plate	(3-C)
5	YEFA09508	Side Plate	(2-C)
6	YEFC025671	Escutcheon Ass'y, Unit	(2-C)
7	YEFC026175	Escutcheon Ass'y, Detachable	(1-A)
8	YEFA131358	Cover	(2-B)
9	YEFE134685	Button, RLSE	(1-A)
10	YEFE135572	Button, PRESET	(1-A)
11	YEFE135150	Button, VOL UP	(2-A)
12	YEFE135151	Button, VOL DOWN	(2-A)
13	YEFE135570	Button, AM/FM	(2-A)
14	YEFE135165	Button, ATT/LOUD	(2-A)
15	YEFE135162	Button, SEL	(2-A)
16	YEFE135145	Button, PWR	(1-A)
17	YEFE134702	Button, EJECT/DISP	(1-A)
18	YGFE134716	Button, CD	(2-C)
19	YEFF01829C	Heat Sink	(3-B)
20	YEFJ05030	Color Rivet	(3-C)
21	YEFK04518	Holder, Pilot Lamp	(2-B)
22	YEFK04514	Holder, Pilot Lamp	(2-A)
23	YEFK06794	Holder, LCD	(2-A)
24	YEFR04140	Illumination Cap	(2-A) (2-B)
25	YEFV011813	Insulator	(1-B)
26	YEFV021485	Optical Shade	(2-A)
27	YEFV011890	Insulator	(3-A)
28	YEFV021626	Optical Shade	(2-A)
29	YEFX0213649A	Bracket, CN701	(1-C)
30	YEFX0214680	Bracket, LCD	(2-A)
31	YEFX0213945B	Bracket, IC241	(1-B)

Ref. No.	Part No.	Part Name & Description	Remarks
32	YEFX0011814A	Transparent Plate	(2-A)
33	YEFX0214481	Bracket, Deck	(3-A)
34	YEFX0214167	Bracket, IC704	(3-C)
35	YEFX0011809	Transparent Plate	(2-A)
36	YEFX0214168	Bracket, IC702	(1-B)
37	YEFX0213673	Bracket, CN200	(3-C)
38	YEFX007380	Cord Clamper	(4-B)
39	YEFX0052153	Spring	(2-A)
40	YEFR04187	Lead Cap	(4-C)
41	YEFS02302	Felt	(2-C)
42	YEFS011113	Pad	(2-C)
43	YEFX0052175	Spring	(2-C)
44	YEFX0052176	Spring	(2-C)
45	YEFX9991689	Release Hook	(2-C)
46	YEFC05554	Trim Plate	(2-B)
50	YEJS06092	Screw, 3mm * 10mm	
51	XTB3+6FFX	Tapping Screw, 3mm * 6mm	
52	YEJT03009	Tapping Screw, 3mm * 8mm	
53	XTB3+8GFX	Tapping Screw, 3mm * 8mm	
54	YGJT03156	Tapping Screw, 2.6mm * 5mm	
55	XTB26+6GFX	Tapping Screw, 2.6mm * 6mm	
56	XTN2+8GFZ	Tapping Screw, 2mm * 8mm	
	XTB2+5FFX	Tapping Screw, 2mm* 5mm	

EXPLODED VIEW (Unit)

■ Numbers in ○ are indicated REF.NO. in the REPLACEMENT PARTS LIST



2 CD Player Parts

Note :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
5. "A" marks in remarks column are indicated supply parts of Audio Division(AD) in Matsushita Electric Industrial Co., Ltd.(MEI)
6. "V" marks in remarks column are indicated supply parts of Video System Division(VSD) in Matsushita Electric Industrial Co., Ltd.(MEI)

IC's and Transisrtors

Ref. No.	Part No.	Part Name & Description	Remarks
IC1	AN8835SBE1	IC	V
IC2	MN662741RPA	IC	A
IC3	BA6795FPE2	IC	A
IC4	MB89193-233E	IC	A
Q1	2SA1037AKTXR	Transistor	V
Q2	DTC114TKT96	Transistor	V

Diodes

Ref. No.	Part No.	Part Name & Description	Remarks
D1	MA141WKTX	Diode	A

Capacitors

Ref. No.	Part No.	Part Name & Description	Remarks
C1	RCSX0JX226LE	Tantalum, 22MFD 6.3WV	V
C3	ECEA0JKA101I	Electrolytic, 100MFD 6.3WV	
C4	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C5	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C6	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C7	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C8	ECUV1H272KBN	Chip, 0.0027MFD 50WV	V
C9	ECUV1E273KBN	Chip, 0.027MFD 25WV	V
C10	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C11	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C12	ECUV1H222MBN	Chip, 0.0022MFD 50WV	V
C13	ECUV1H182KBN	Chip, 0.0018MFD 50WV	V
C14	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C15	ECUV1C473KBN	Chip, 0.047MFD 16WV	V
C16	ECUV1E223KBN	Chip, 0.022MFD 25WV	V
C17	ECUV1E273KBN	Chip, 0.027MFD 25WV	V
C18	ECUV1H471KBN	Chip, 470PF 50WV	V
C19	ECUV1E104MBN	Chip, 0.1MFD 25WV	V
C20	ECUV1E223KBN	Chip, 0.022MFD 25WV	V
C21	ECUV1C224KBM	Chip, 0.22MFD 16WV	V
C22	ECUV1C224KBM	Chip, 0.22MFD 16WV	V
C23	ECUV1H070DCN	Chip, 7PF 50WV	V
C24	ECUV1H220JCN	Chip, 22PF 50WV	V
C25	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C26	ECUV1H102KBN	Chip, 0.001MFD 50WV	V
C27	ECUV1H102KBN	Chip, 0.001MFD 50WV	V
C28	ECUV1E223ZFN	Chip, 0.022MFD 25WV	V
C29	RCE0JPK221IG	Electrolytic, 220MFD 6.3WV	V
C30	ECUV1E154MBM	Chip, 0.15MFD 25WV	V
C33	RCE0JPK221IG	Electrolytic, 220MFD 6.3WV	V
C34	ECUV1H561KBN	Chip, 560PF 50WV	V
C35	ECEA0JKA101I	Electrolytic, 100MFD 6.3WV	
C36	ECEA1AKA221I	Electrolytic, 220MFD 10WV	
C37	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C38	ECEA0JKA221I	Electrolytic, 220MFD 6.3WV	
C39	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C40	ECUV1H472MBN	Chip, 0.0047MFD 50WV	V
C42	ECUV1E104ZFN	Chip, 0.1MFD 25WV	V
C44	ECUV1H331KBN	Chip, 330PF 50WV	V
C45	ECUV1E224ZFM	Chip, 0.22MFD 25WV	V
C56	ECUV1H221KBN	Chip, 220PF 50WV	A

Resistors

Ref. No.	Part No.	Part Name & Description	Remarks
R1	ERJ6GEYJ150	Chip, 15 OHMS 1/10W	
R2	ERJ6GEYJ221	Chip, 220 OHMS 1/10W	
R3	ERJ6GEYJ150	Chip, 15 OHMS 1/10W	
R5	ERJ6GEYJ330	Chip, 33 OHMS 1/10W	
R6	ERJ6GEYJ224	Chip, 220k OHMS 1/10W	
R7	ERJ6GEYJ184	Chip, 180k OHMS 1/10W	
R8	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R9	ERJ6GEYJ103	Chip, 10k OHMS 1/10W	
R10	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R11	ERJ6GEYJ103	Chip, 10k OHMS 1/10W	
R12	ERJ6GEYJ393	Chip, 39k OHMS 1/10W	
R13	ERJ6GEYJ183	Chip, 18k OHMS 1/10W	
R14	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R15	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R16	ERJ6GEYJ154	Chip, 150k OHMS 1/10W	
R17	ERJ6GEYJ683	Chip, 68k OHMS 1/10W	
R18	ERJ6GEYJ471	Chip, 470 OHMS 1/10W	
R20	ERJ6GEYJ101	Chip, 100OHMS 1/10W	
R21	ERJ6GEYJ220	Chip, 22 OHMS 1/10W	
R22	ERJ6GEYJ220	Chip, 22 OHMS 1/10W	
R23	ERJ6GEYJ822	Chip, 8.2k OHMS 1/10W	
R24	ERJ6GEYJ682	Chip, 6.8k OHMS 1/10W	
R25	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R26	ERJ6GEYJ333	Chip, 33k OHMS 1/10W	
R27	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R28	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R29	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R30	ERJ6GEYJ103	Chip, 10k OHMS 1/10W	
R31	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R32	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R33	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R34	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R35	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R36	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R37	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R39	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R40	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R41	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R42	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R43	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R44	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R45	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R46	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
R47	ERJ6GEYJ121	Chip, 120 OHMS 1/10W	
R49	ERJ6GEYJ155V	Chip, 1.5M OHMS 1/10W	V
R50	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R51	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R52	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R53	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R54	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R55	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R56	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R57	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R58	ERJ6GEYJ473	Chip, 47k OHMS 1/10W	
R62	ERJ6GEYJ272	Chip, 2.7k OHMS 1/10W	
R63	ERJ6GEYJ102	Chip, 1k OHMS 1/10W	
RJ1	ERJ8GEY0R00V	Chip, 0 OHM 1/8W	
RJ2	ERJ8GEY0R00V	Chip, 0 OHM 1/8W	
RJ3	ERJ8GEY0R00V	Chip, 0 OHM 1/8W	
RJ4	ERJ8GEY0R00V	Chip, 0 OHM 1/8W	
RJ5	ERJ6GEYJ1R8V	Chip, 1.8 OHMS 1/10W	V
RJ6	ERJ6GEY0R00V	Chip, 0 OHM 1/10W	
RJ7	ERJ8GEY0R00V	Chip, 0 OHM 1/8W	

Oscillators

Ref. No.	Part No.	Part Name & Description	Remarks
X1	RVBCST4R00MT	Ceramic Oscilator	V
X2	RSXC16M9S01T	Crystal Oscilator	V

Connectors

Ref. No.	Part No.	Part Name & Description	Remarks
CN1	RJS2A1816T	Connector, 16P	V
CN2	RJS1A7114T	Connector, 14P	V
CN3	RJS1A7105T	Connector, 5P	V
CN4	RJP2G17ZA	Connector, 2P	V
CN5	RJS2A1405T	Connector, 5P	V

Switches

Ref. No.	Part No.	Part Name & Description	Remarks
SW1	ESE11SH2	Switch	V
SW2	RSP1A015-A	Switch	V
SW3	RSP1A015-A	Switch	V
SW4	RSP1A015-A	Switch	V
SW5	RSP1A015-A	Switch	V

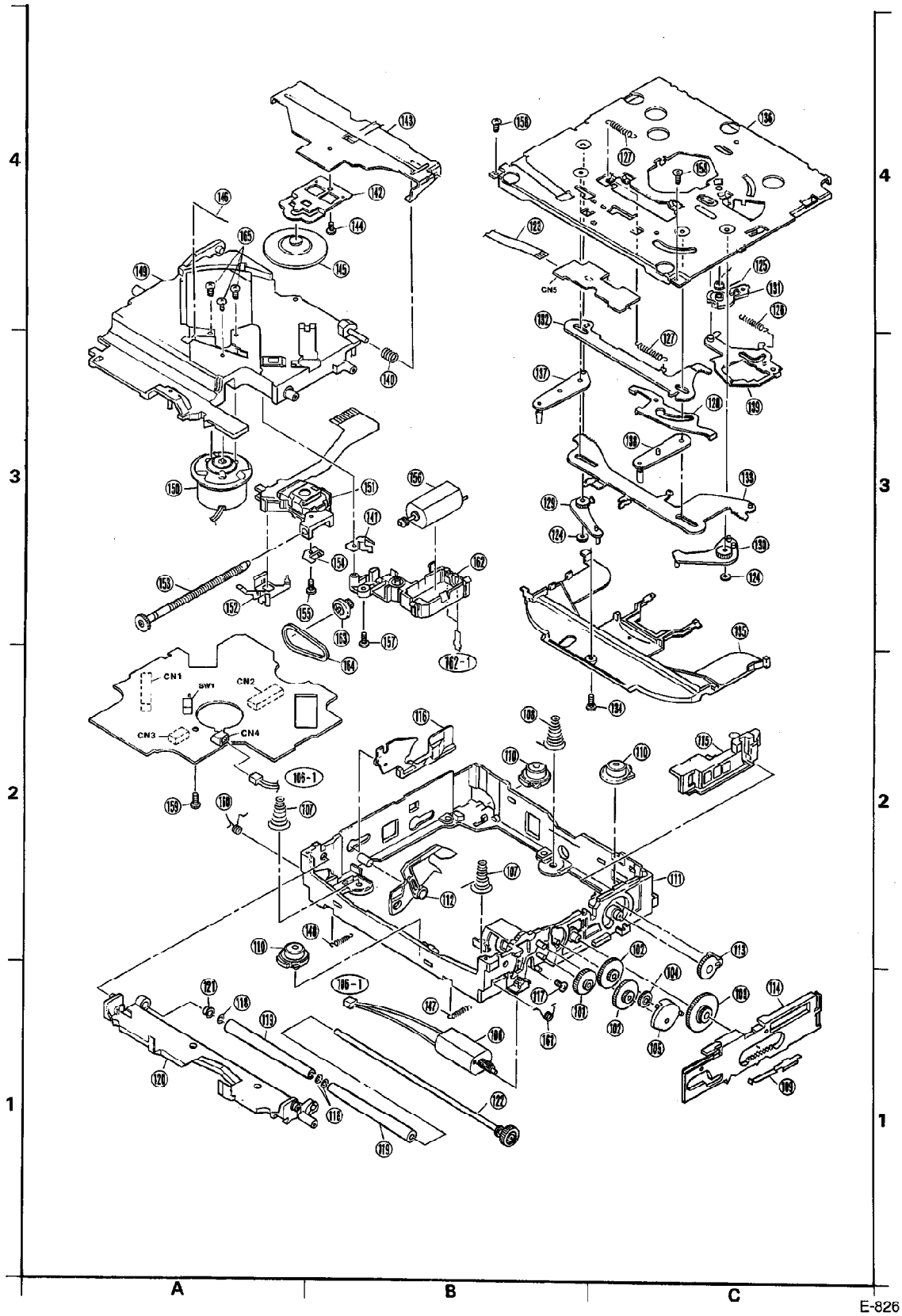
Miscellaneous

Ref. No.	Part No.	Part Name & Description	Remarks
101	RDG0350	Gear	V (1-B)
102	RDG0351	Gear N2	V (1-C)
103	RDG0352-1	Loading Gear	V (1-C)
104	RDG0353	Roller Drive Gear	V (1-C)
105	RDG0354	Roller Drive Arm	V (1-C)
106	REM0060	Loading Motor	V (1-B)
106-1	REE0669	Lead Wire	V (2-A) (1-B)
107	RMB0465	Spring	V (2-A) (2-B)
108	RMB0466	Spring	V (2-A)
109	RMC0292	Main Slider Spring	V (1-C)
110	RMG0408-K	Insullator	V (2-A) (2-B)
111	RMK0309-2	Mechanism Frame	V (2-B)
112	RML0432	Lock Arm	V (2-B)
113	RML0433-1	Drive Arm	V (2-C)
114	RMR0952-W	Main Slider	V (1-C)
115	RMR0953-W	Lift Slider	V (2-C)
116	RMR0954-W	Lock Slider	V (2-B)
117	XYN2+C5	Screw, 2mm * 5mm	V (1-B)
118	RHW31005	Washer	V (1-A)
119	RMG0382-H	Rubber Roller	V (1-A)
120	RML0434	Roller Arm	V (1-A)
121	RMR0769-W	Roller Bering	V (1-A)
122	RXJ0017	Roller Shaft	V (1-B)
123	REE0668	Flexible PCB	V (4-B)
124	RHW27004	Washer	V (3-C)
125	RMB0461	Spring	V (4-C)
126	RMB0468	Spring	V (4-C)
127	RMB0489	Spring	V (4-C) (3-C)
128	RML0428	Switch Lever	V (3-C)
129	RML0430	Trigger Lever L	V (3-C)
130	RML0431	Trigger Lever R	V (3-C)

Ref. No.	Part No.	Part Name & Description	Remarks
131	RML0435	Lock Lever	V (4-C)
132	RMM0155	Slider A	V (3-C)
133	RMM0156	Slider B	V (3-C)
134	RMQ0597	Screw	V (2-C)
135	RMR0951-W	Disc Guide	V (2-C)
136	RXK0201	Upper Chssis	V (4-C)
137	RXL0134	CD Detect Lever L	V (3-B)
138	RXL0135	CD Detect Lever R	V (3-C)
139	RXL0136	Control Arm	V (3-C)
140	RMB0462	Spring	V (3-B)
141	RMC0295	Drive Shaft Retainer	V (3-B)
142	RMC0293	Clamper Retainer	V (4-B)
143	RML0429	Clamp Arm	V (4-B)
144	RMQ0467	Screw	V (4-B)
145	RMR0956-W	Clamper	V (4-B)
146	RMB0345-2	Spring	V (4-A)
147	RMB0445	Spring	V (1-B)
148	RMB0467	Spring	V (2-B)
149	RXK0199	Traverse Chassis	V (4-A)
150	RFKPAJ2751K	Spindle Motor	V (3-A)
151	RAF0140A	Oprical Pickup	V (3-B)
152	RMC0294	Optical Pickup Retainer	V (3-A)
153	RXJ0018	Drive Shaft	V (3-A)
154	RXQ0474	Boad Nut	V (3-B)
155	XQN17+BG45	Screw	V (3-B)
156	REM0061	Traverse Motor	V (3-B)
157	XTW2+6S	Screw, 2mm * 6mm	V (3-B)
158	XQN2+CJ8	Screw, 2mm * 8mm	V (4-C)
159	XTW2+6S	Screw, 2mm * 6mm	V (2-A)
160	RMB0463	Spring	V (2-A)
161	RMB0464	Spring	V (1-B)
162	RXQ0476	Holder	V (3-B)
162-1	RMA0921	Terminal Board	V (3-B)
163	RDP0084	Pulley	V (3-B)
164	RDV0030	Belt	V (2-B)
165	RMQ0461	Screw	V (4-A)

EXPLODED VIEW (CD Deck)

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST



E-826
Printed in Japan (G)
1999.2